



DOCKET NO: P00663.70019.US (RMA)

8/ formal drawings
Step 1
10-29-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Blackadar, et al.
Serial No: 09/643,191
Confirmation No: 8703
Filing Date: August 21, 2000
For: MONITORING ACTIVITY OF A USER IN LOCOMOTION ON FOOT

Examiner: Hal Wachsman
Art Unit: 2857

RECEIVED
OCT 28 2002
TECHNOLOGY CENTER 2800

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Commissioner for Patents, Washington, D.C. 20231, on the 18th day of October, 2002.

Paula K. Wisniewski
Signature

Attn: Official Draftsperson
Commissioner for Patents
Washington, DC 20231

REQUEST FOR APPROVAL AND ENTRY OF FORMAL DRAWINGS

Sir:

Enclosed for filing are forty-two (42) sheets of FORMAL DRAWINGS, Figures 1 through 41, for the above-referenced patent application.

The Commissioner is hereby authorized to charge any fees which may be required to Deposit Account No. 23/2825.

Respectfully submitted,
Thomas P. Blackadar, et al., Applicant

Robert M. Abrahamsen, Reg. No. 40,886
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210
Telephone: (617) 720-3500

Docket No.: P00663.70019 (RMA)
Date: October 18, 2002
xxNDD
651388.1

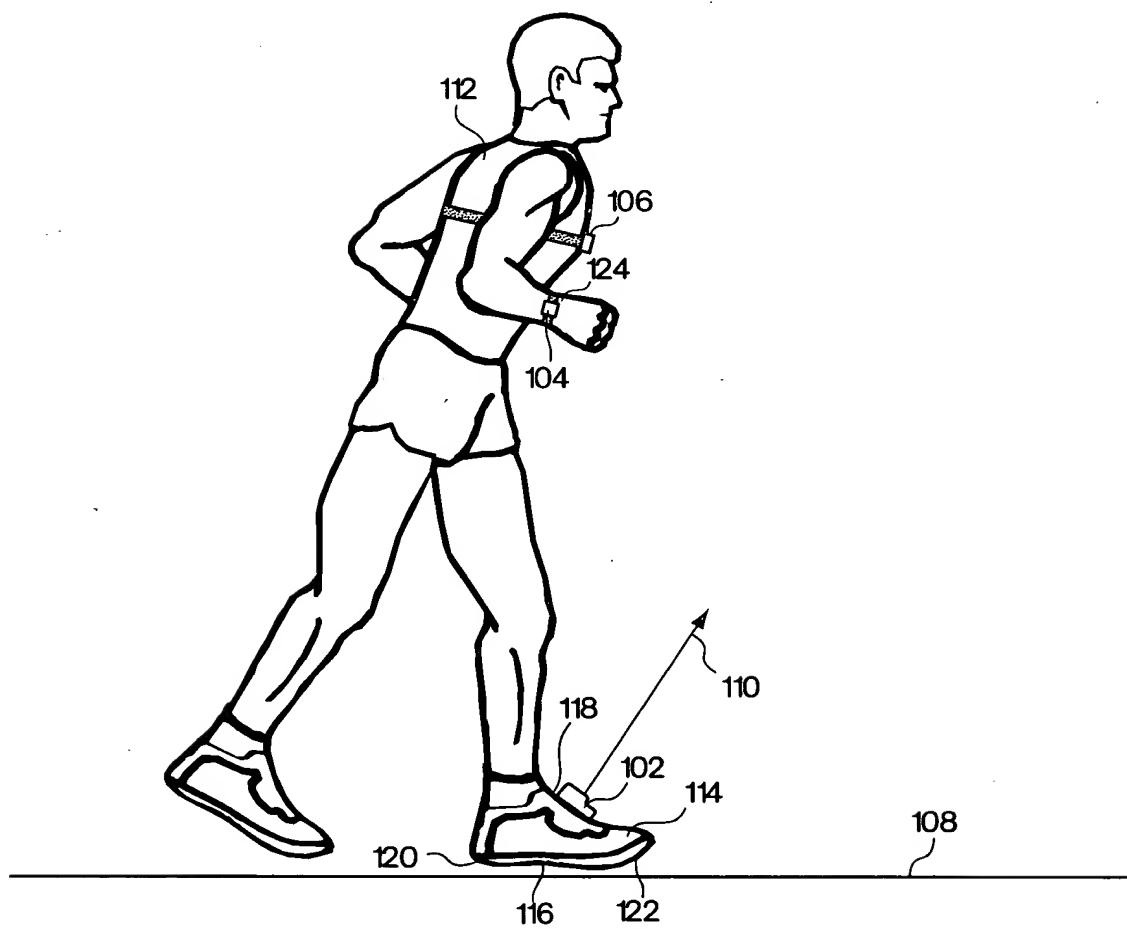


Fig. 1

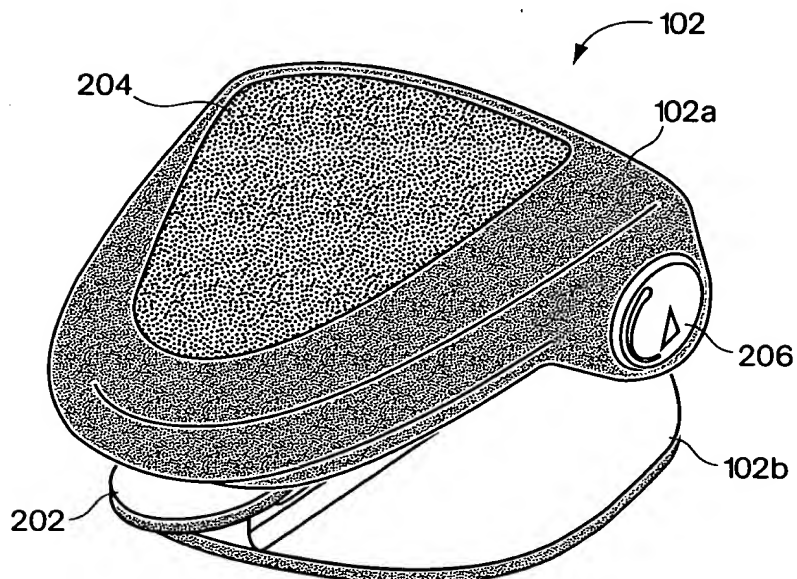


Fig. 2A

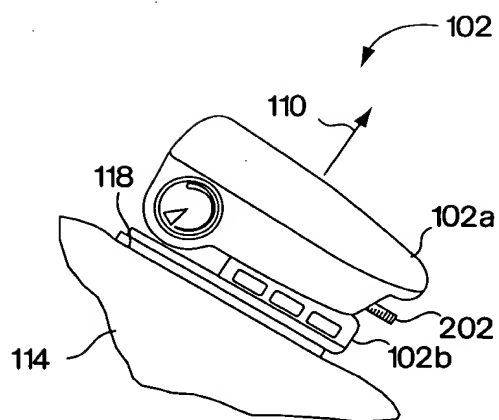


Fig. 2B

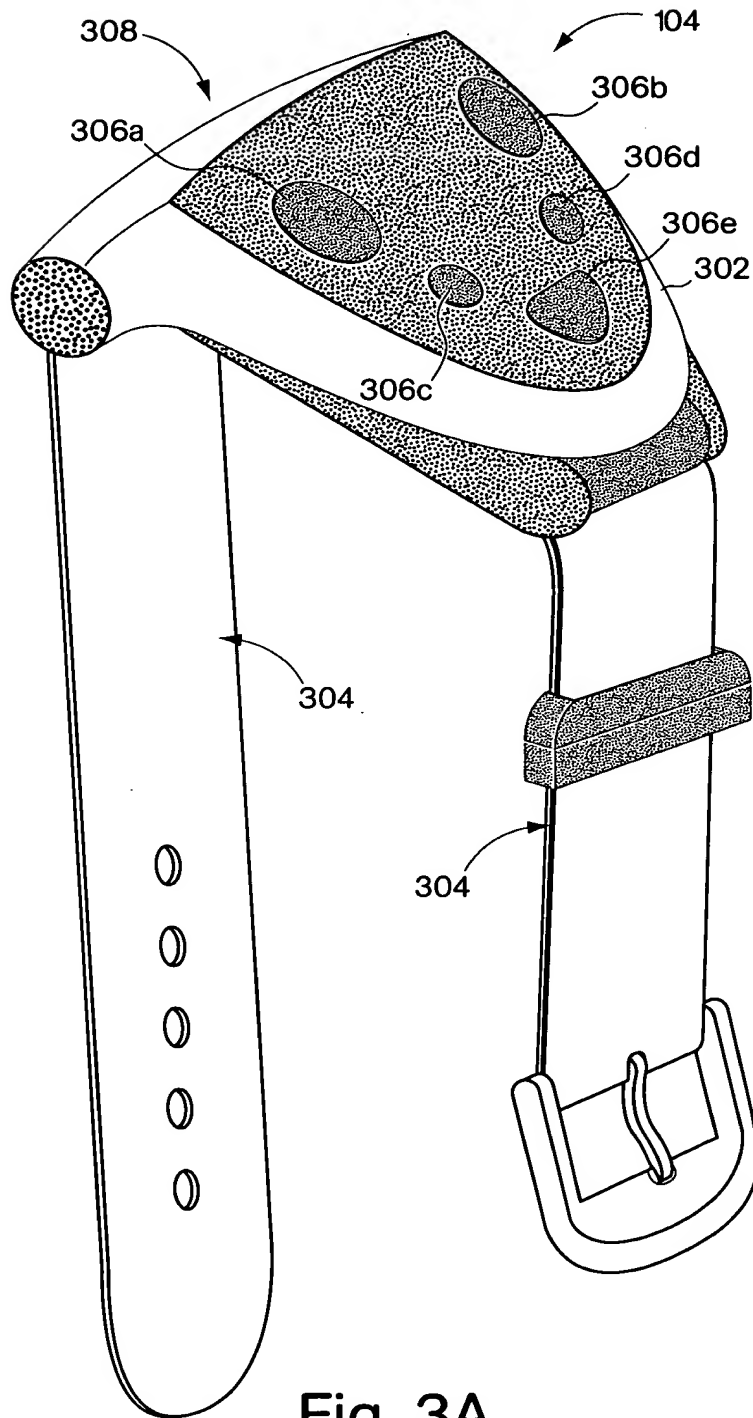


Fig. 3A

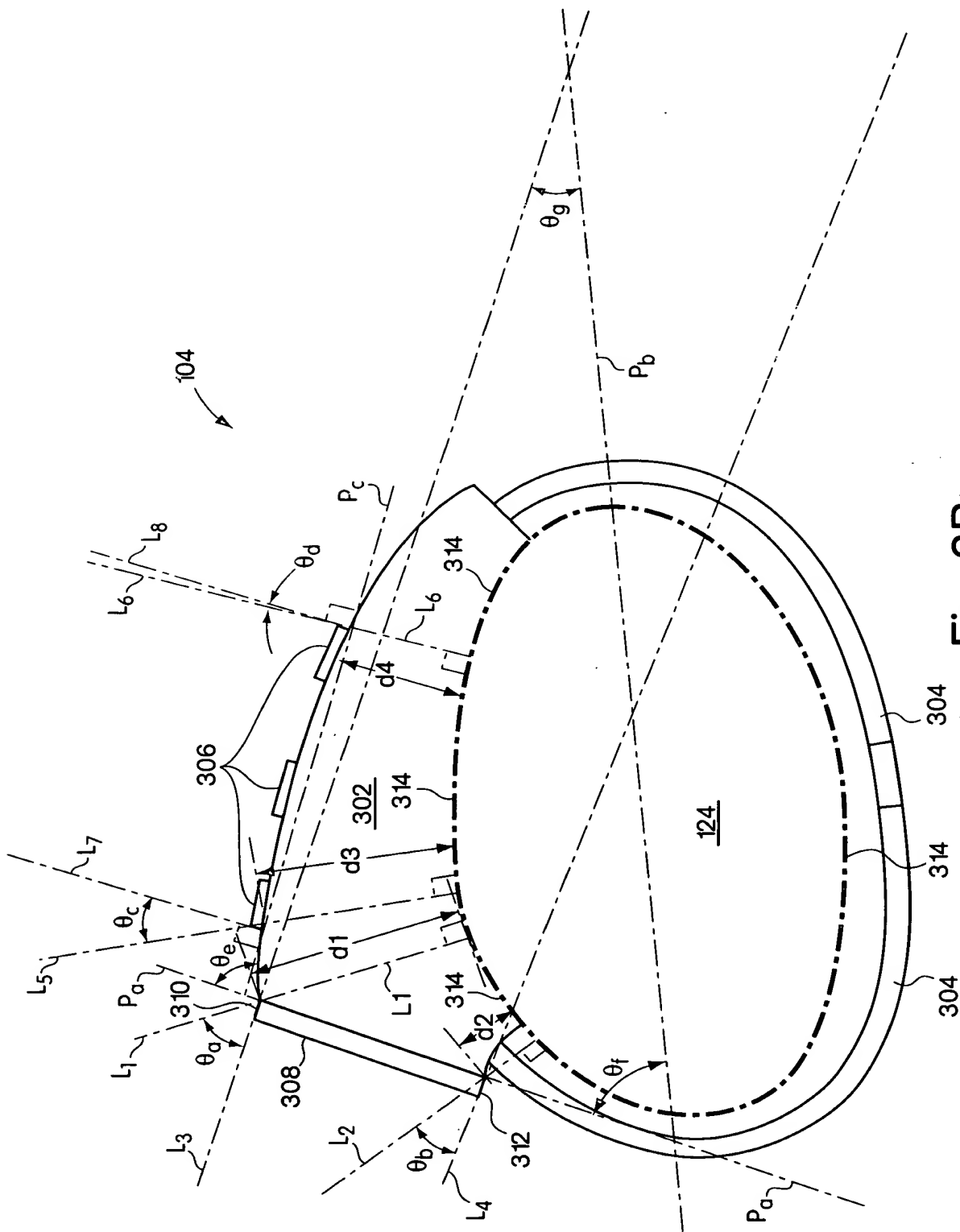


Fig. 3B



5/42

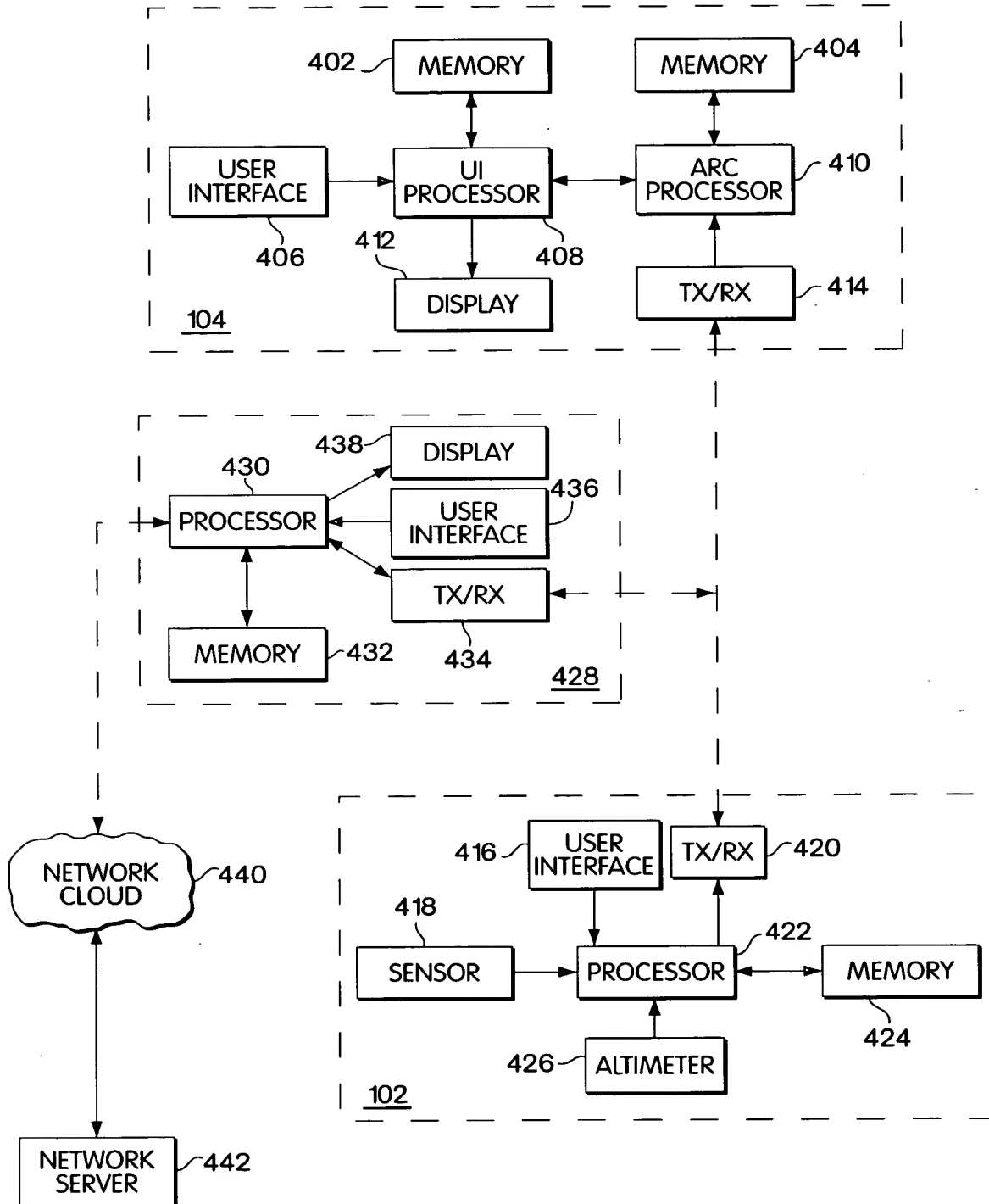


Fig. 4



6/42

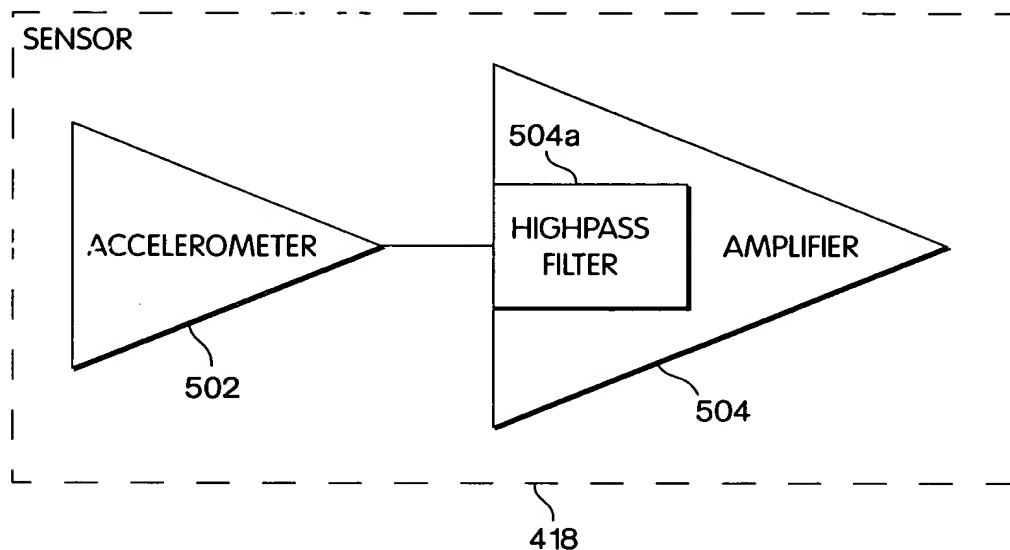


Fig. 5

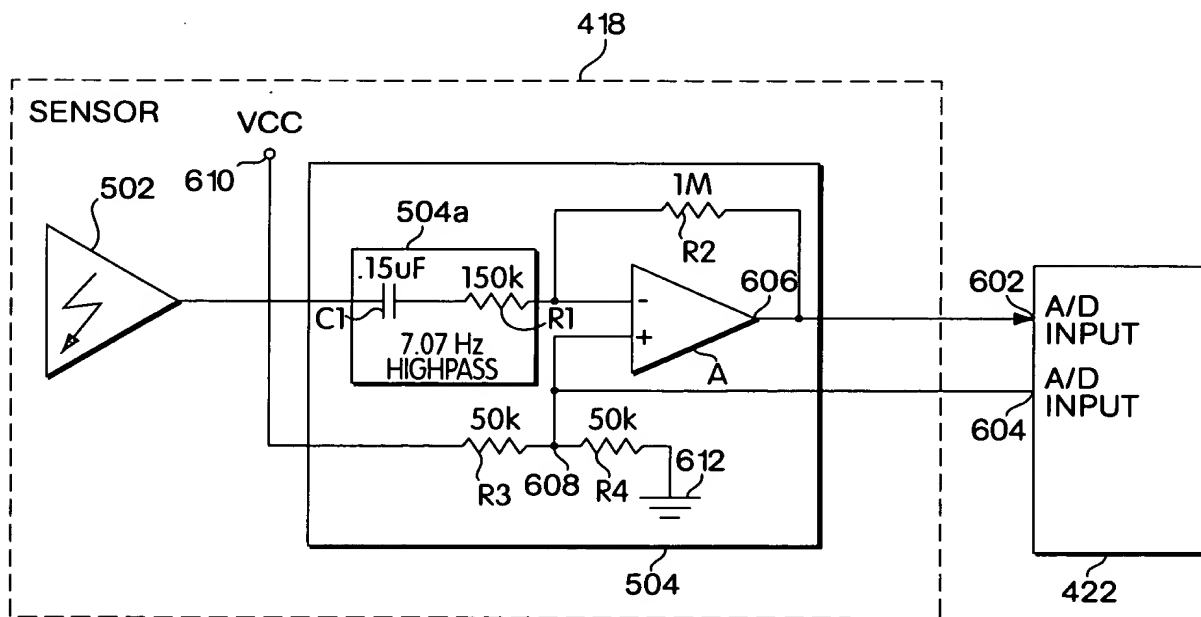


Fig. 6



7/42

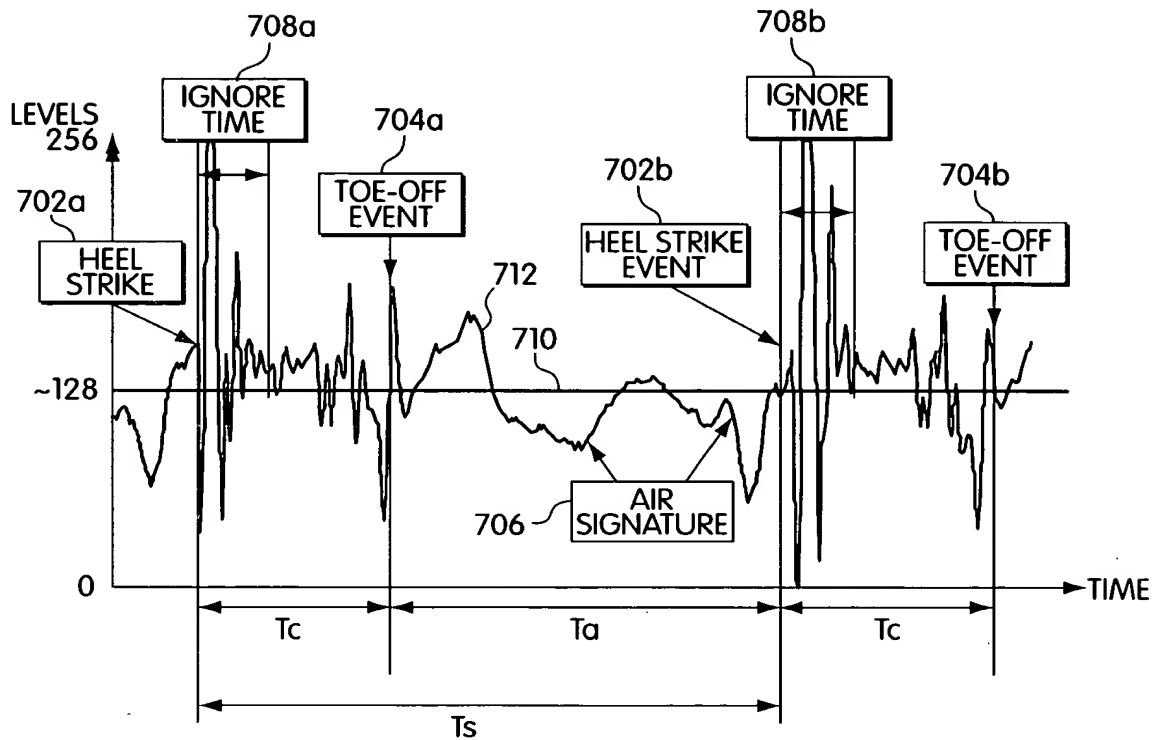


Fig. 7

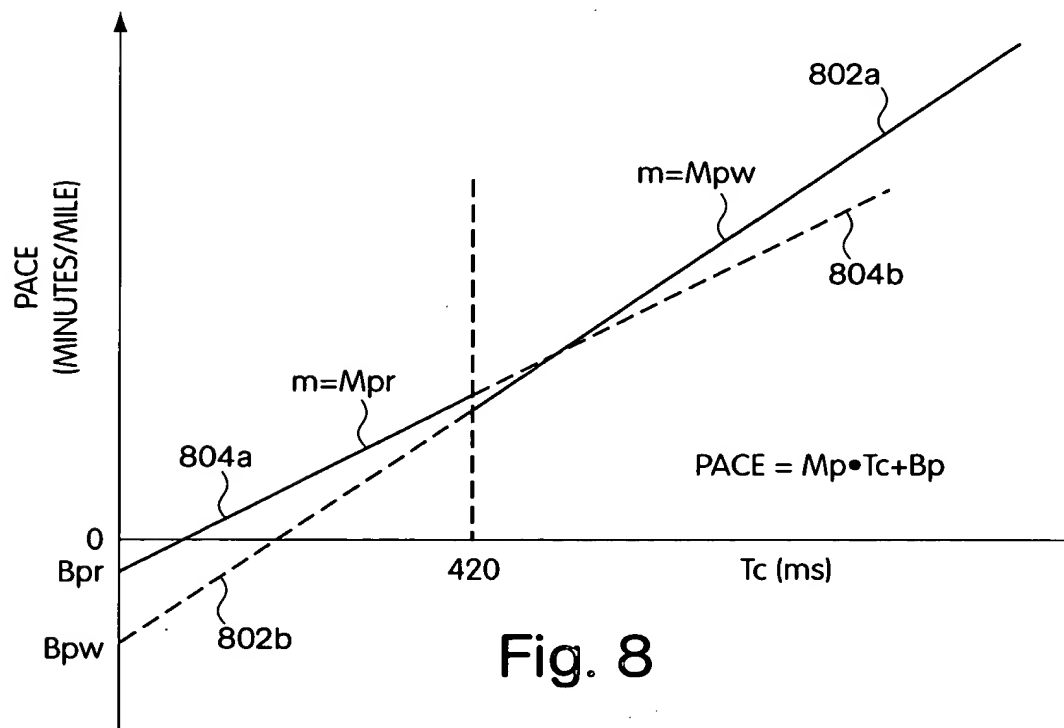
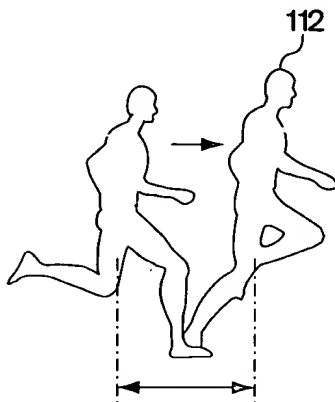


Fig. 8



8/42



$$\text{STEP LENGTH (L}_s\text{)} = T_c \cdot \text{SPEED}$$

Fig. 9

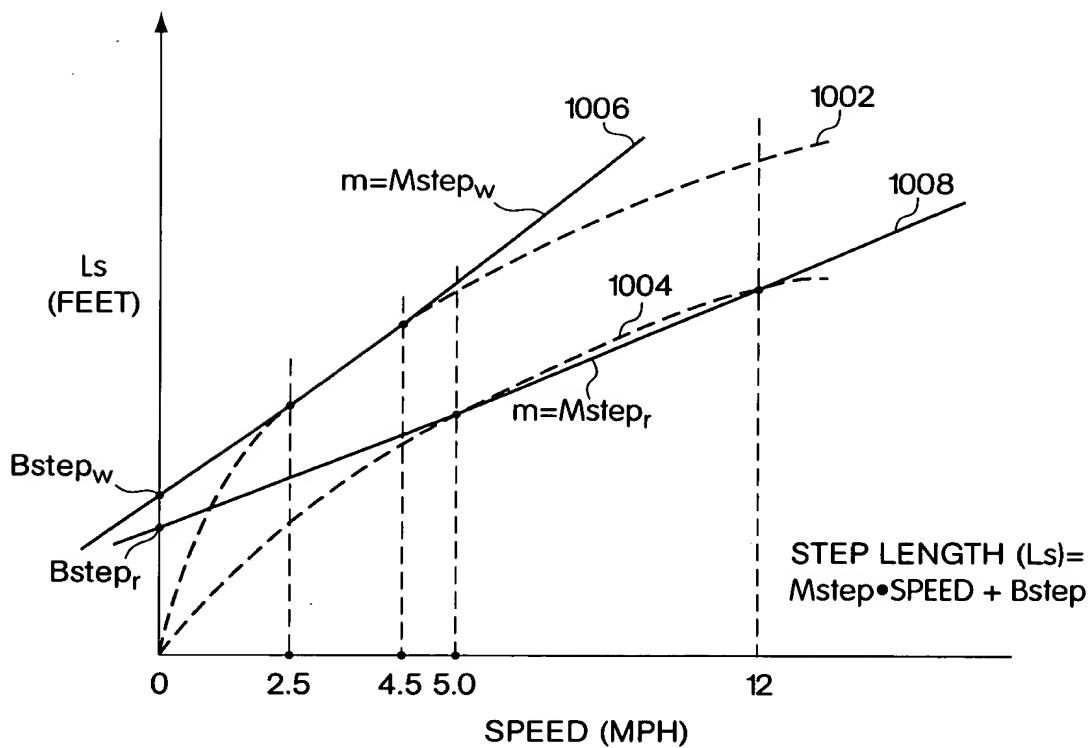


Fig. 10



9/42

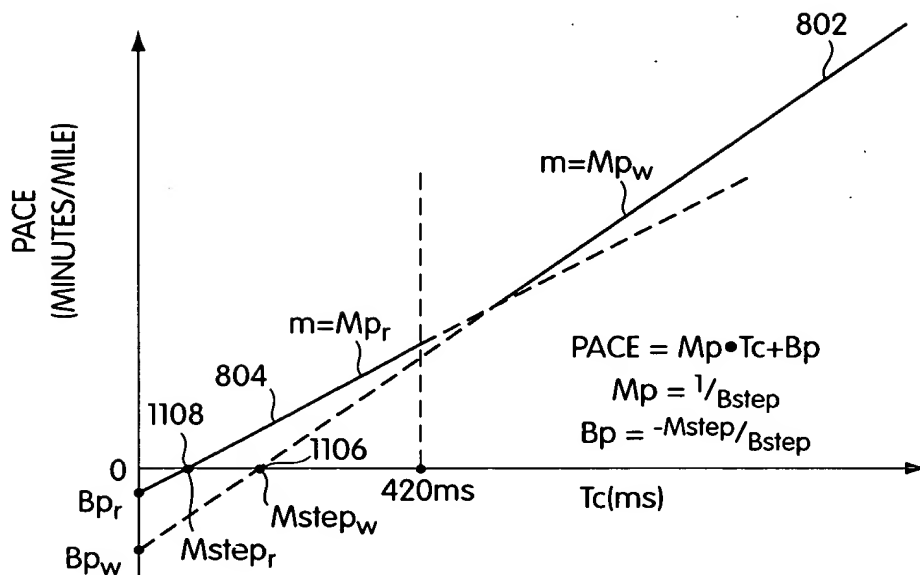


Fig. 11

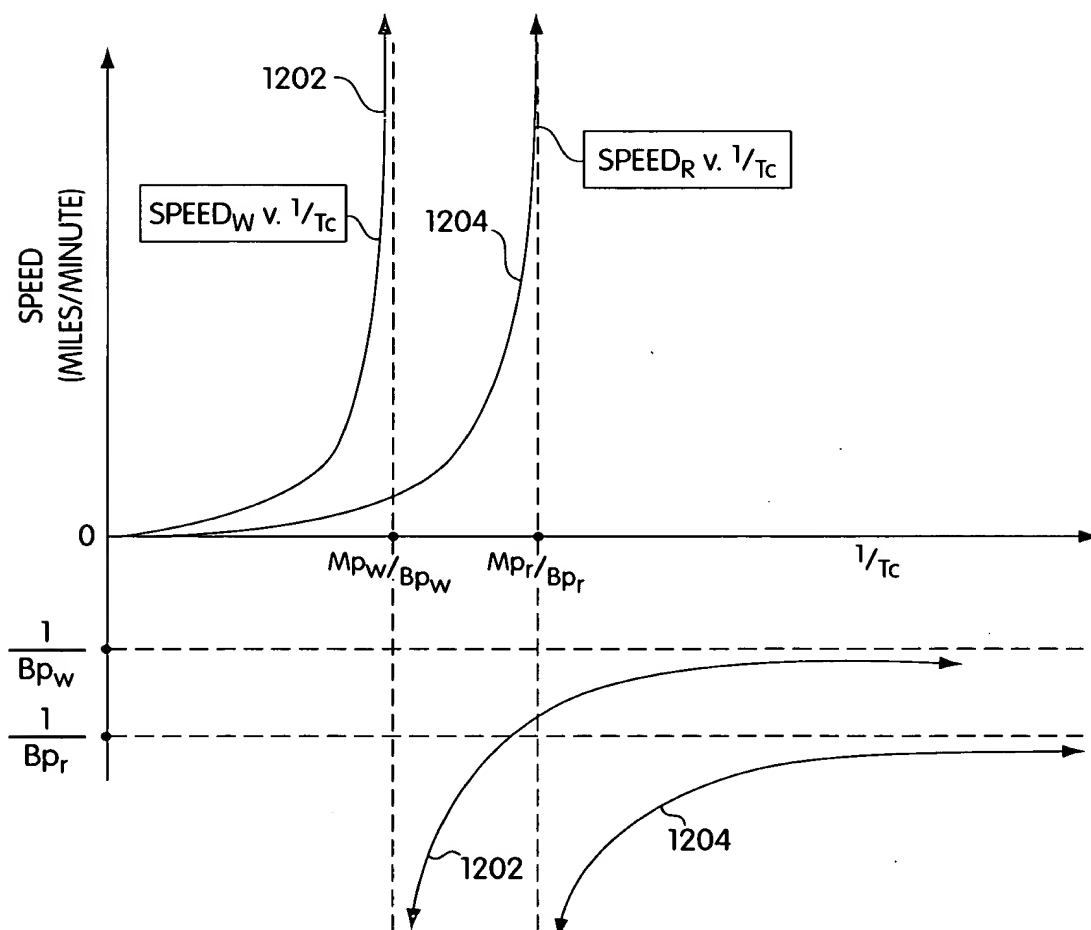


Fig. 12

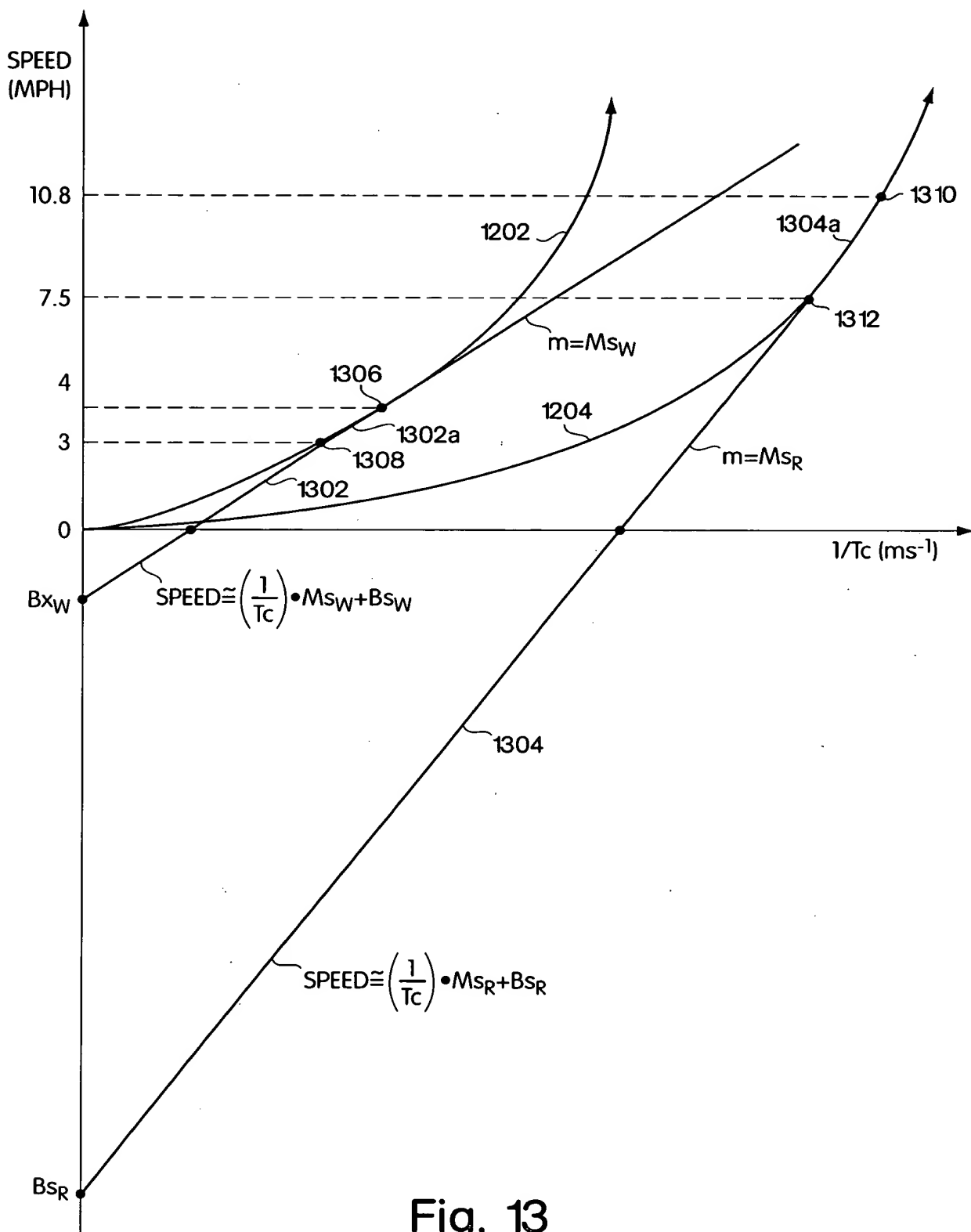


Fig. 13



11/42

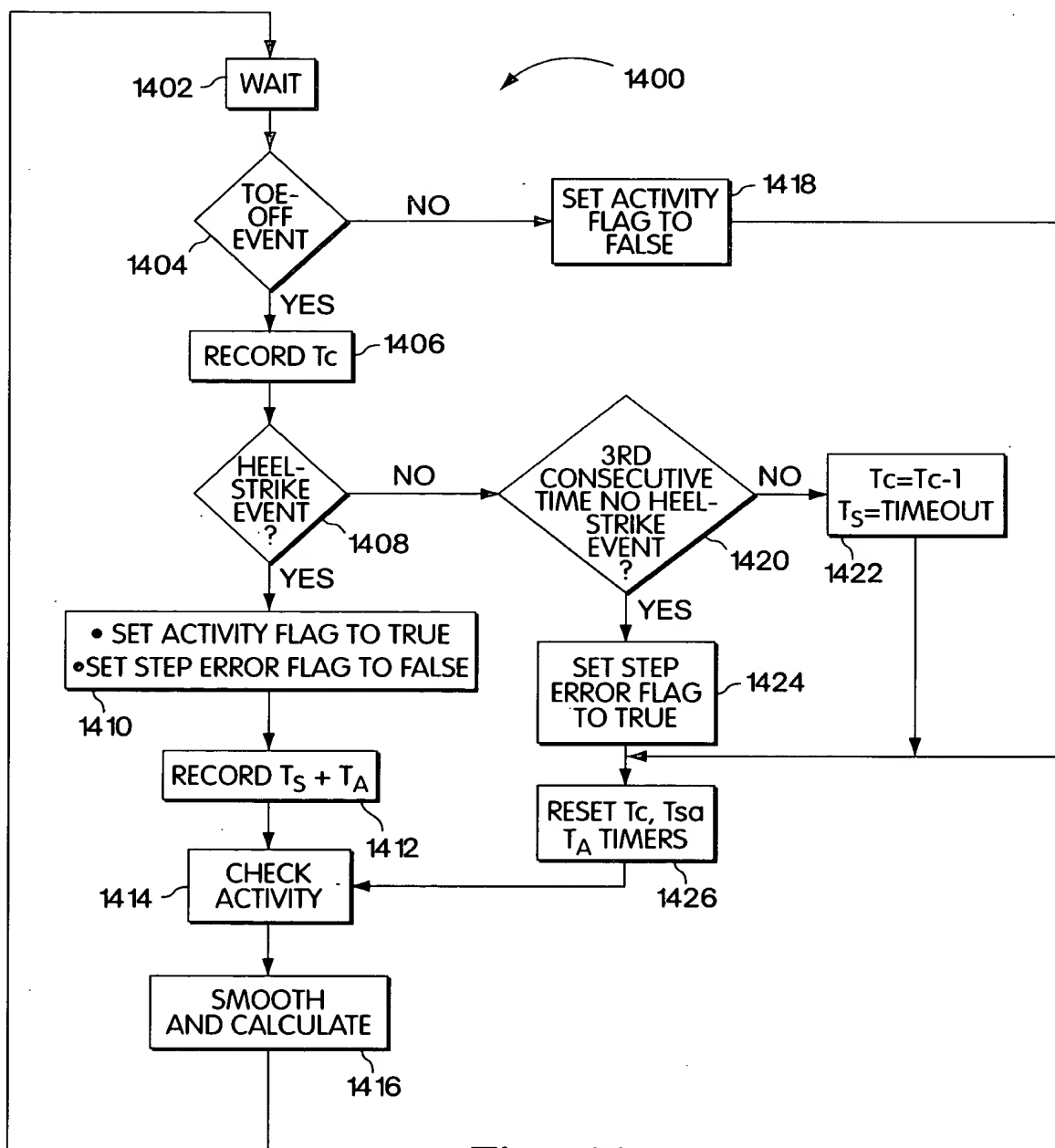


Fig. 14



12/42

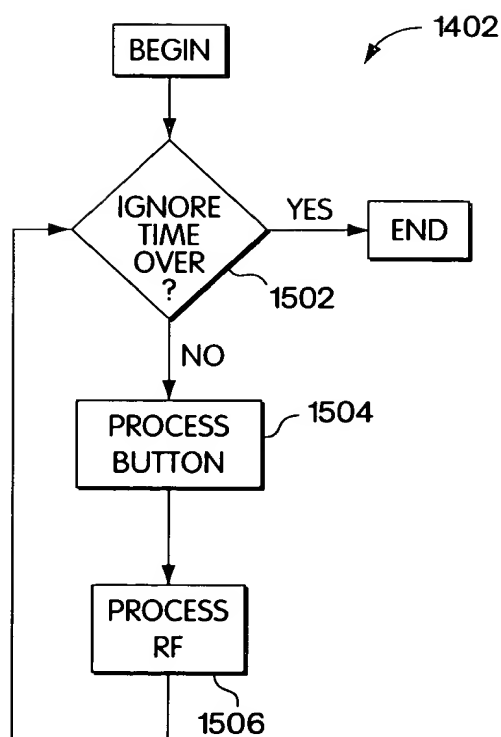


Fig. 15

13/42

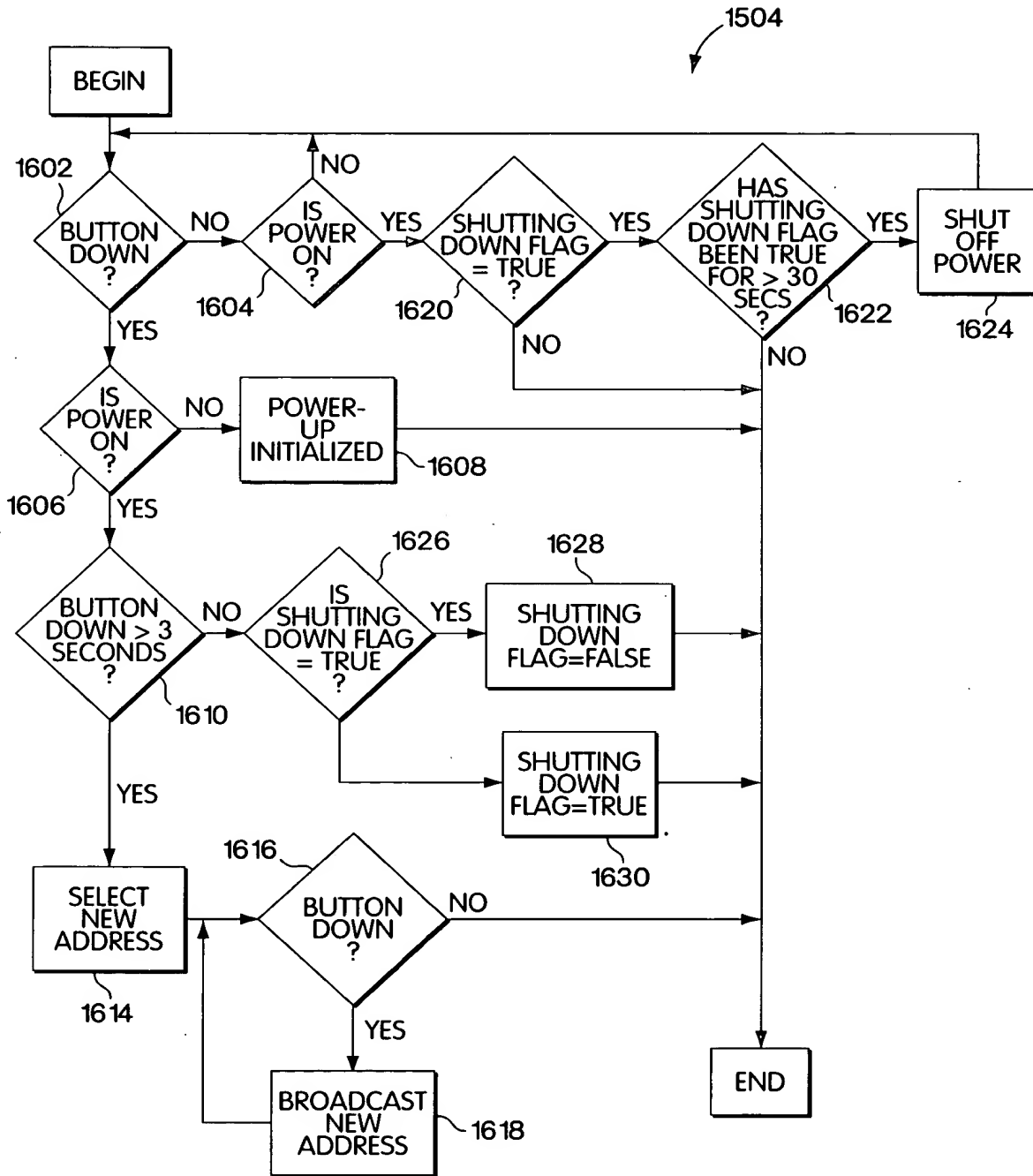


Fig. 16



14/42

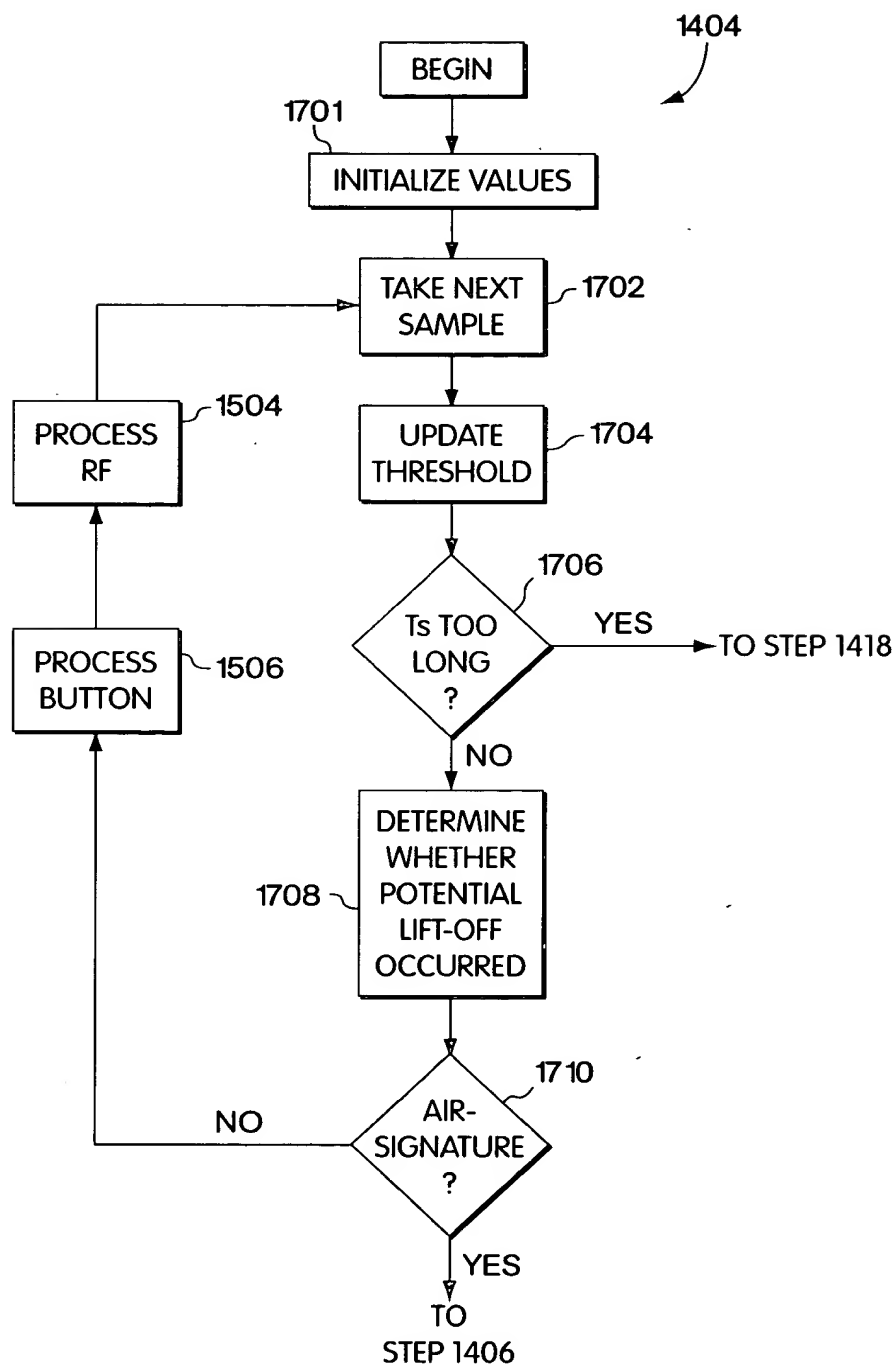


Fig. 17



15/42

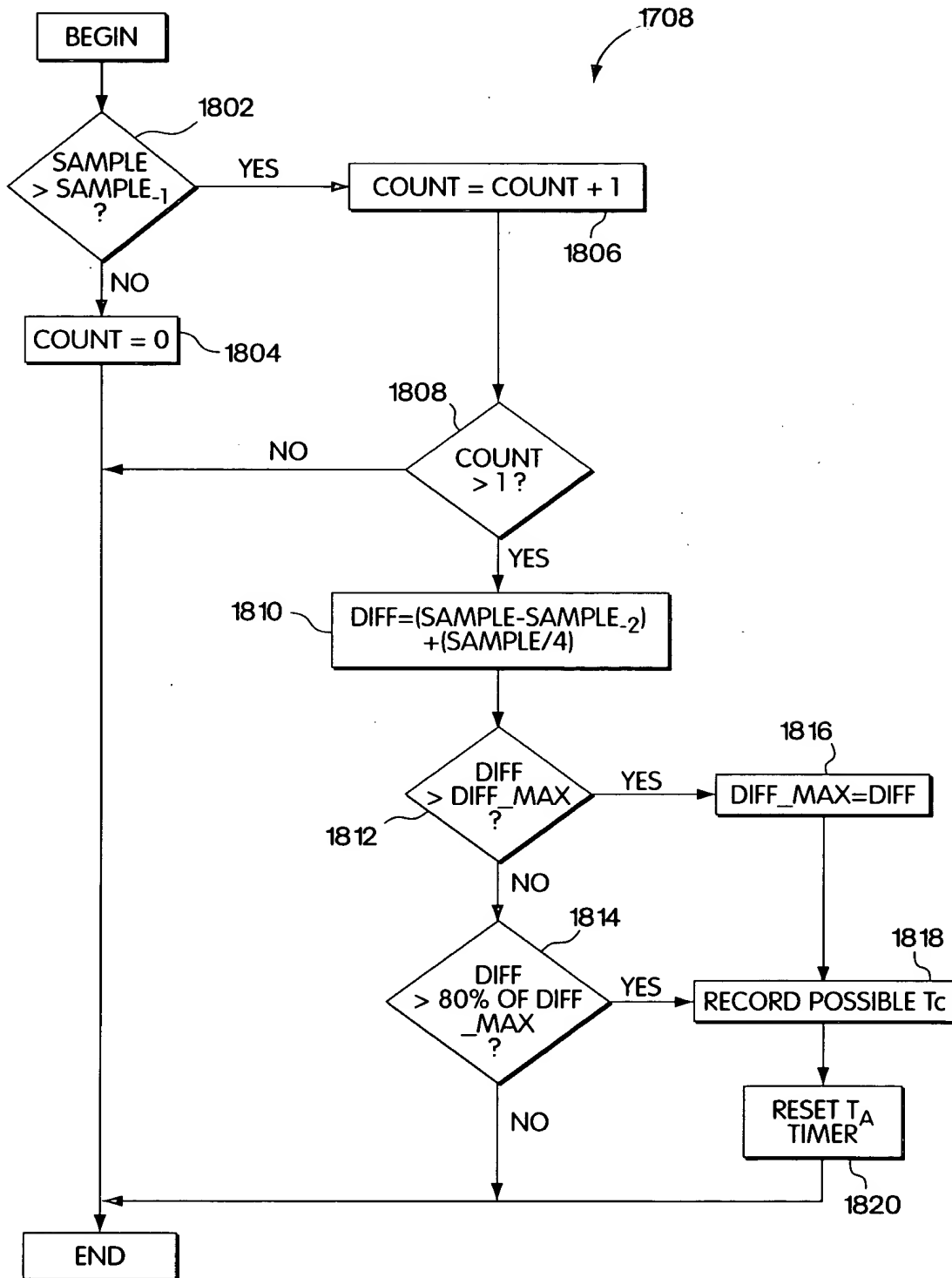


Fig. 18

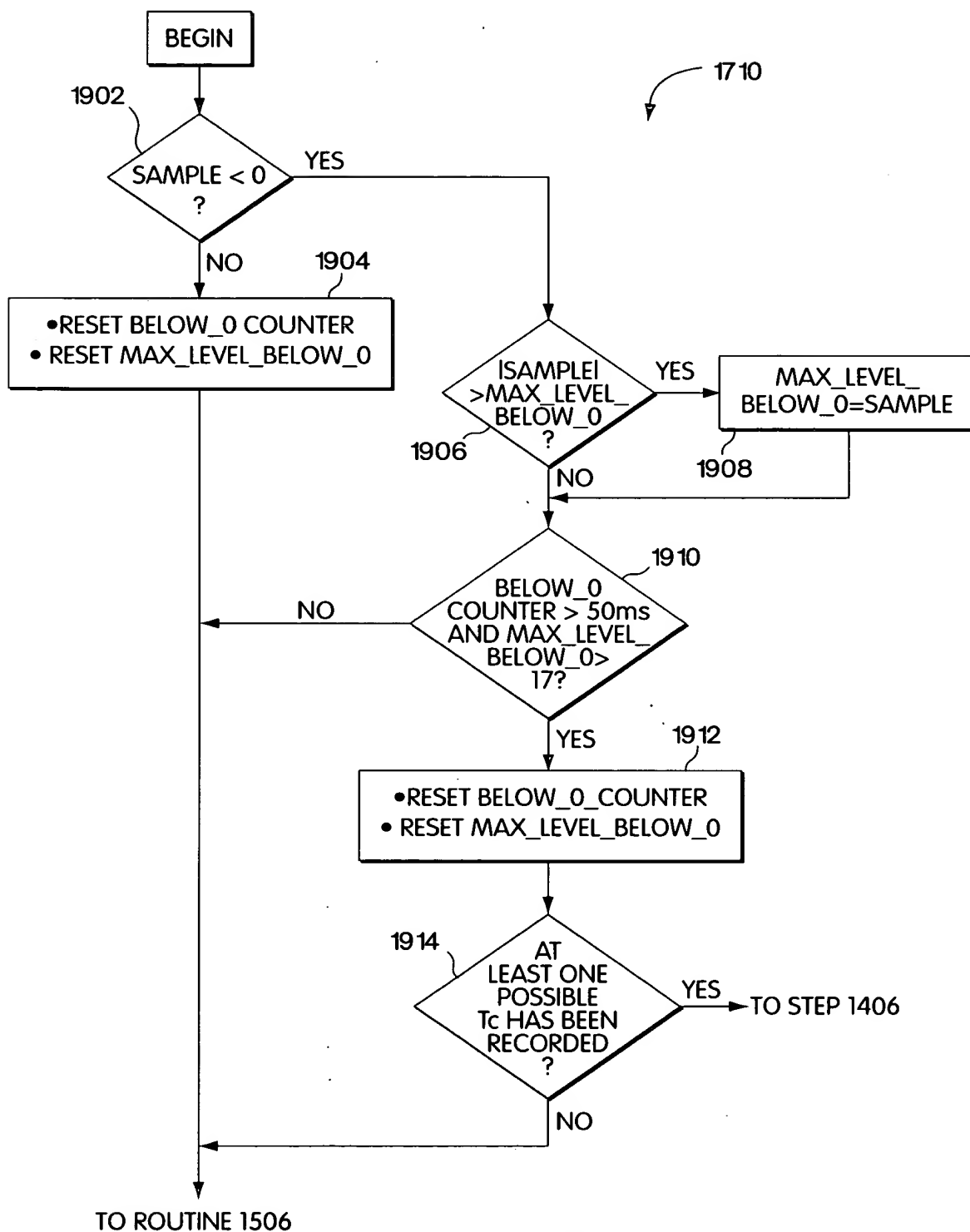


Fig. 19

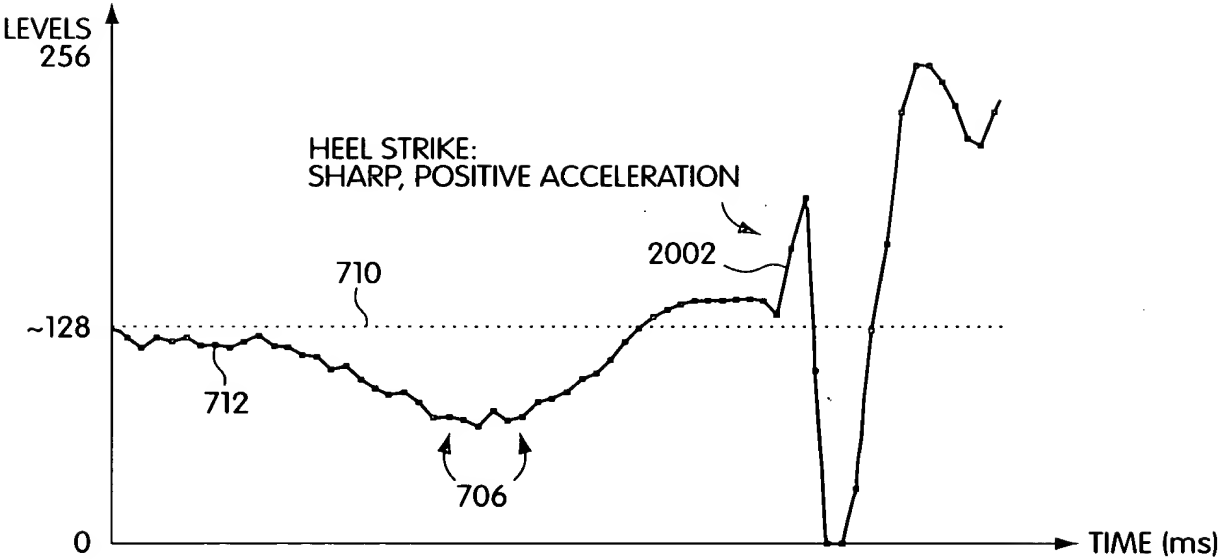


Fig. 20



18/42

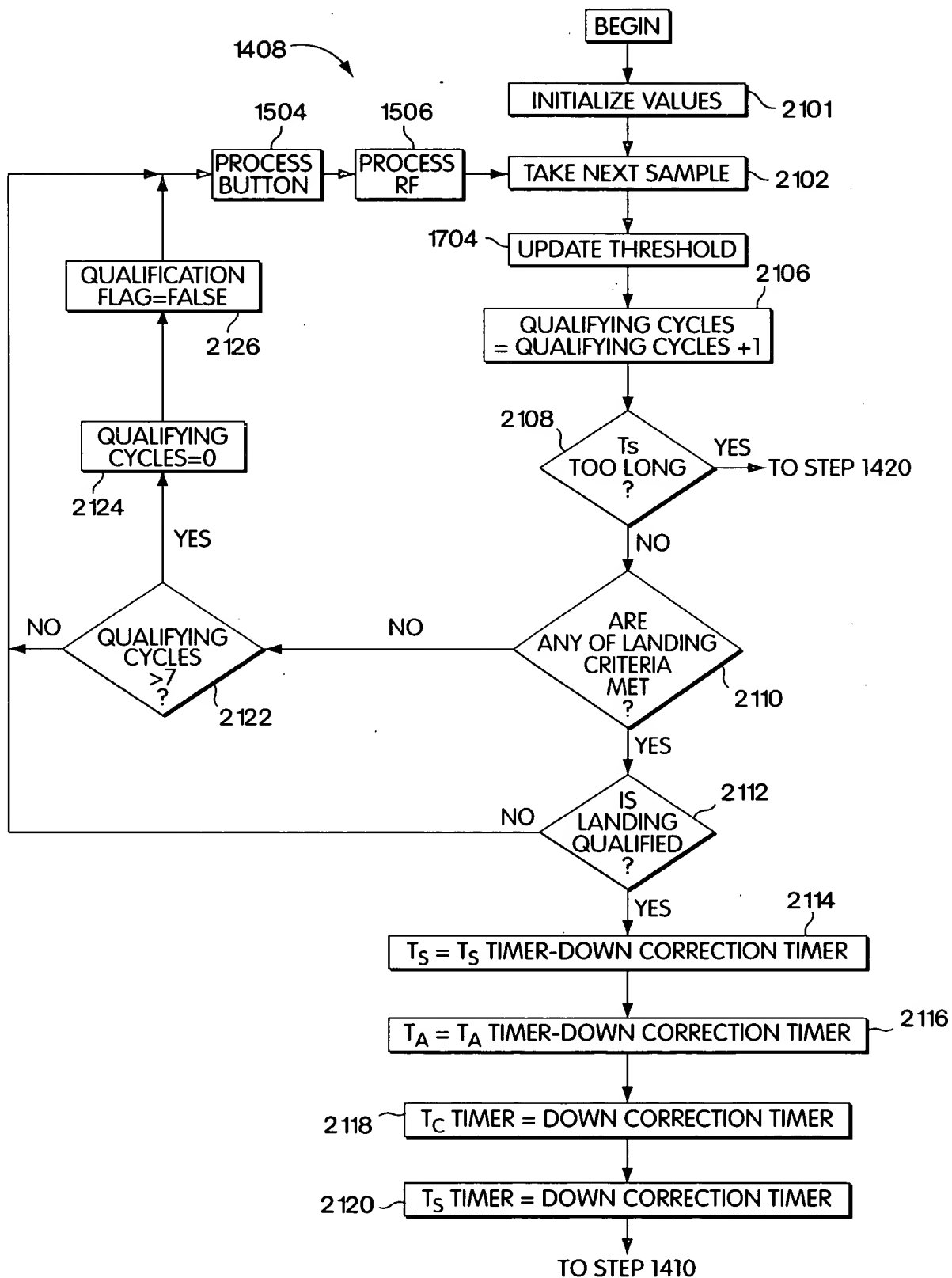
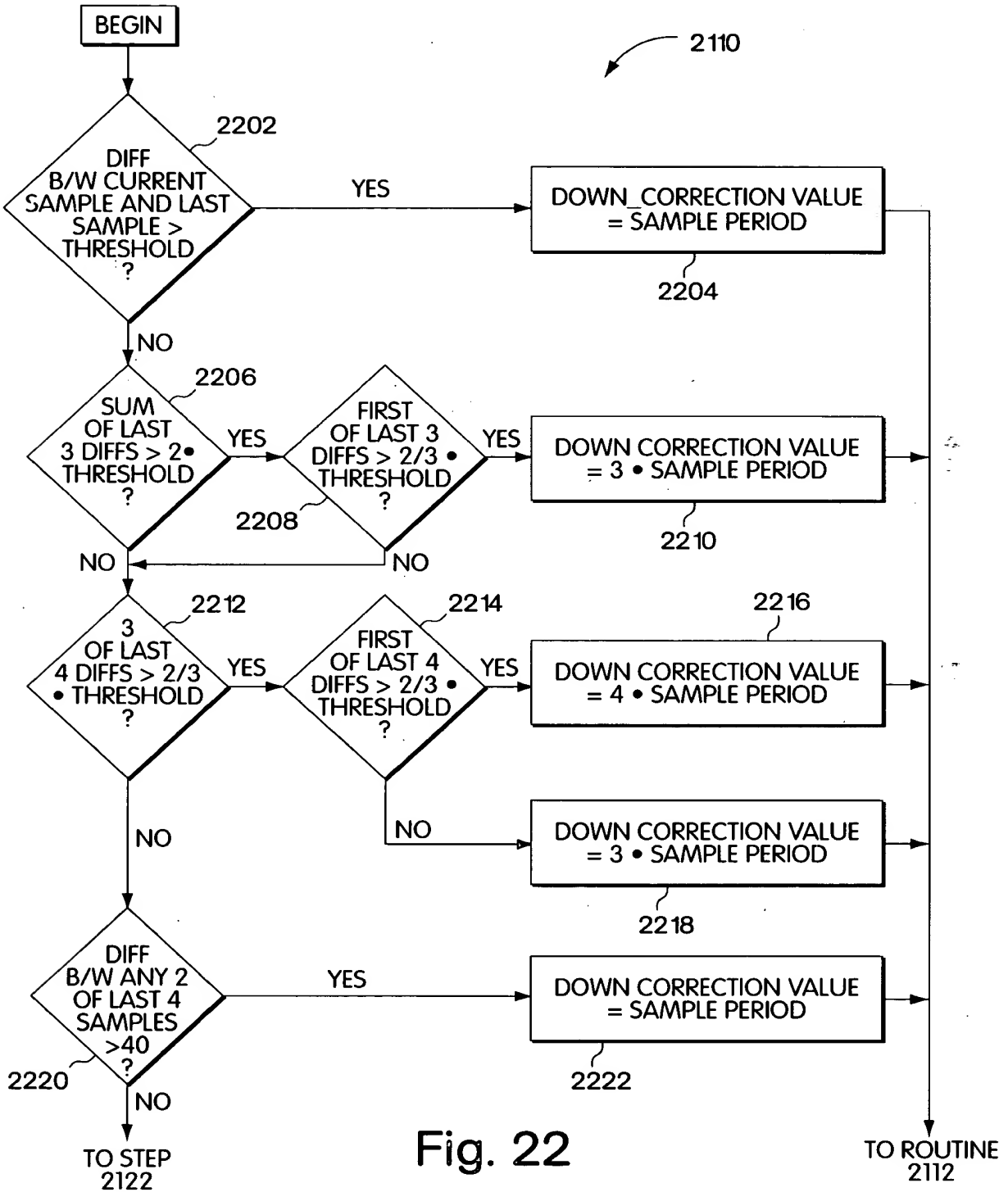


Fig. 21



19/42





20/42

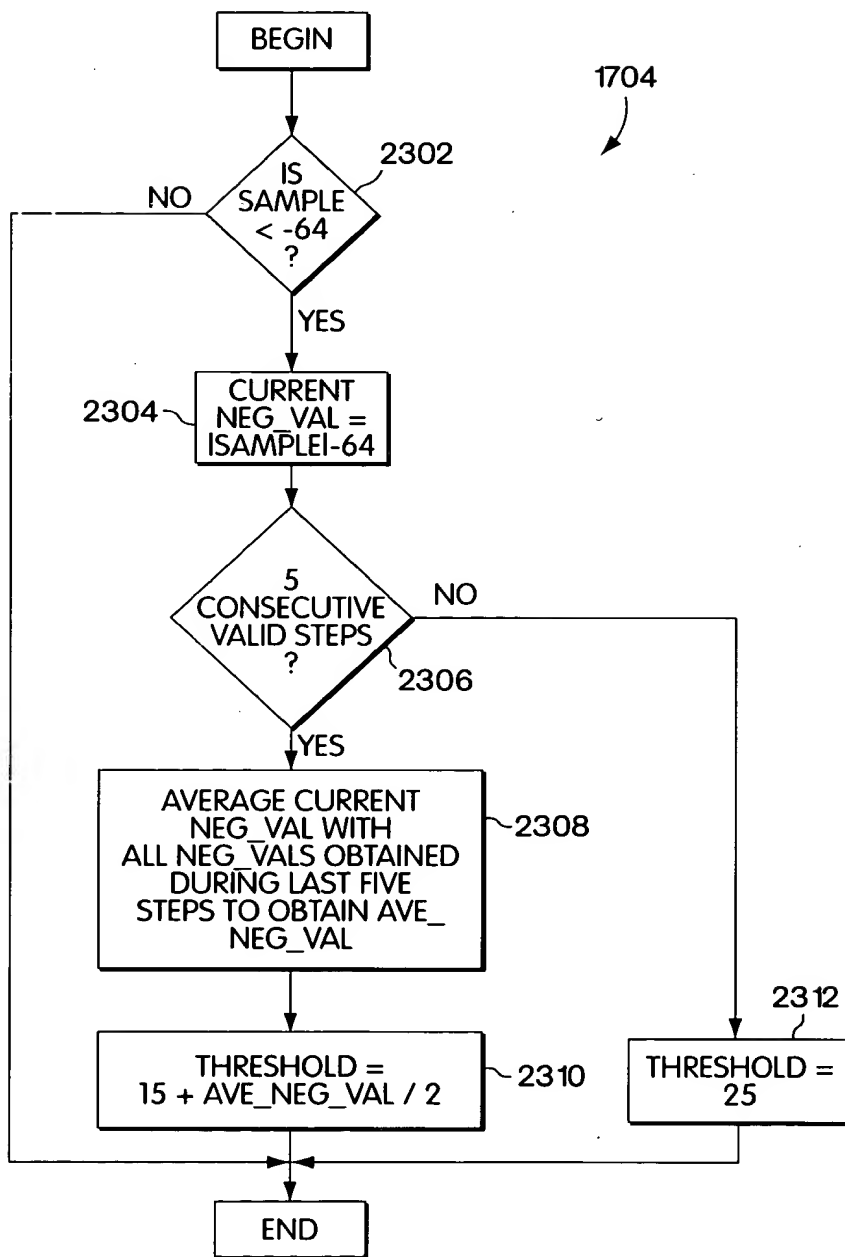


Fig. 23

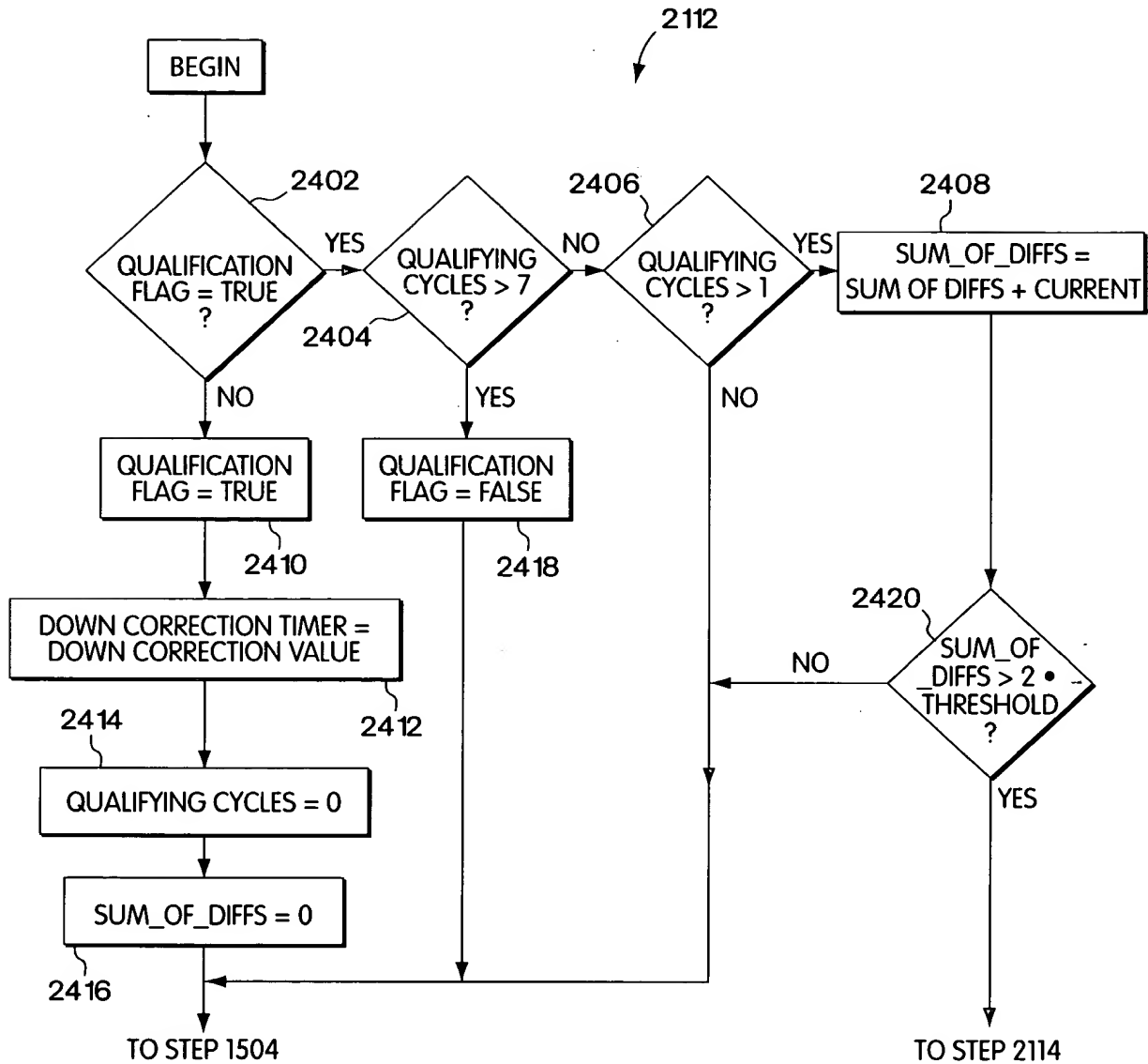


Fig. 24

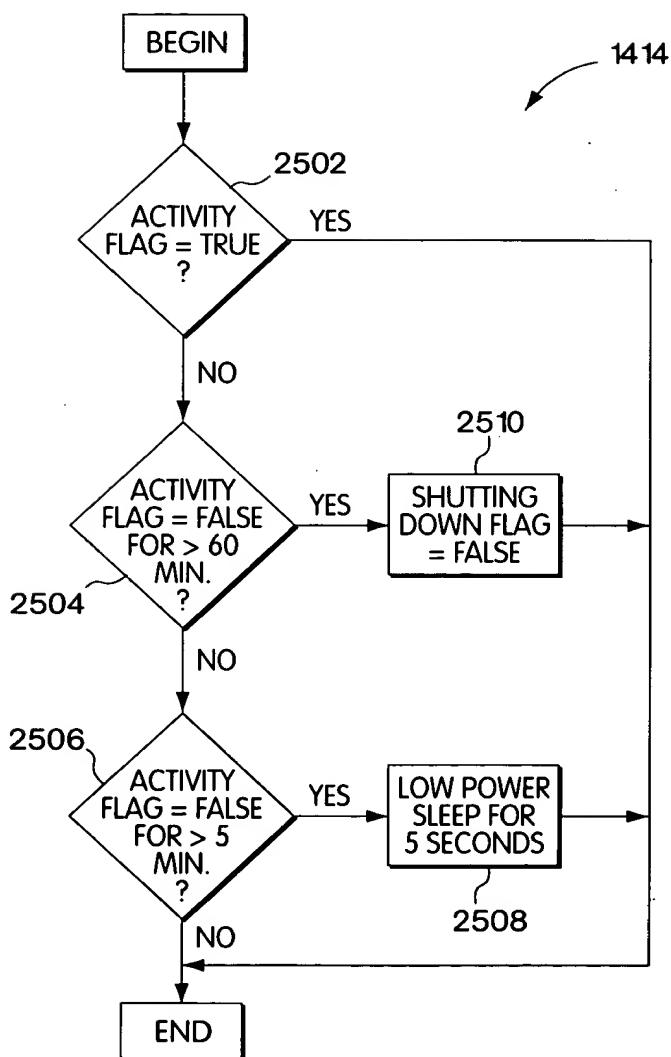


Fig. 25



23/42

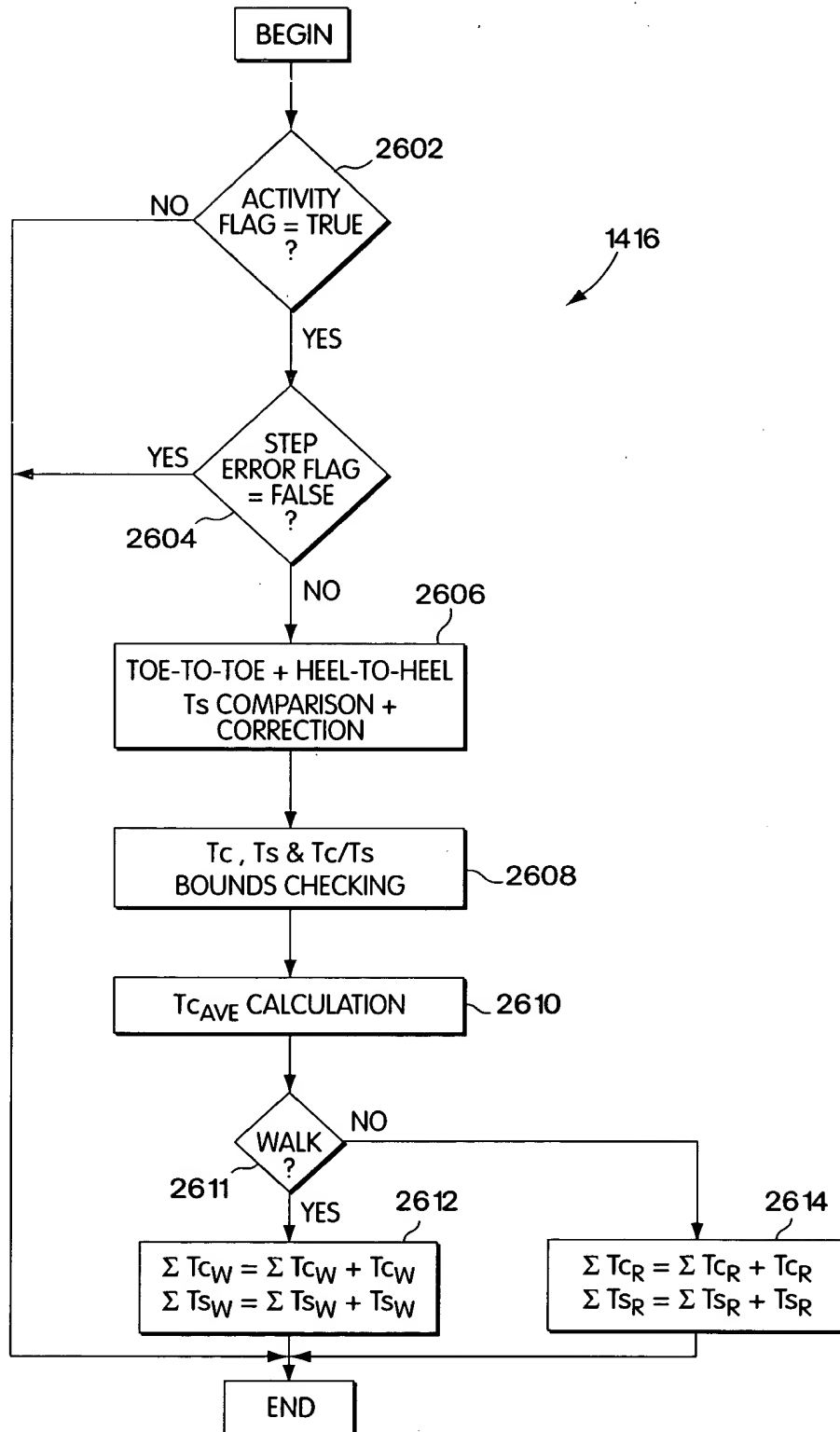


Fig. 26

24/42

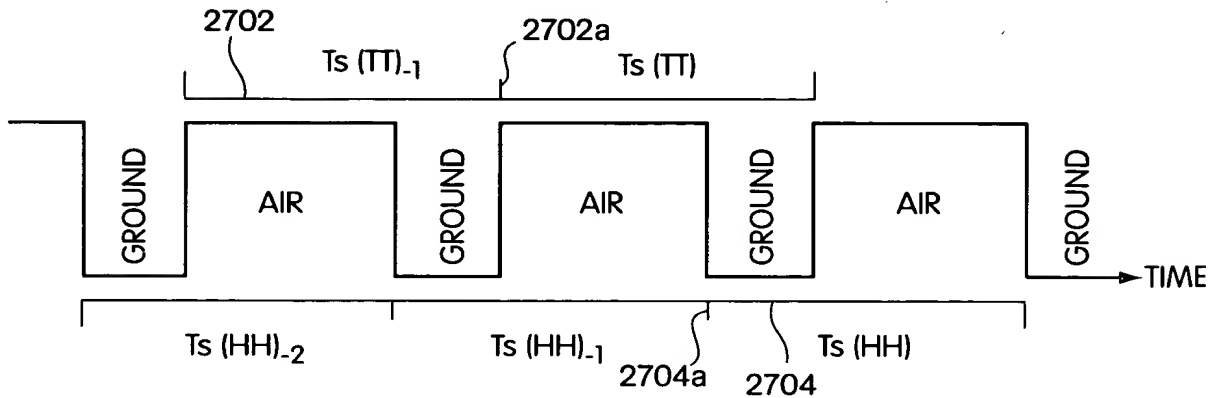


Fig. 27

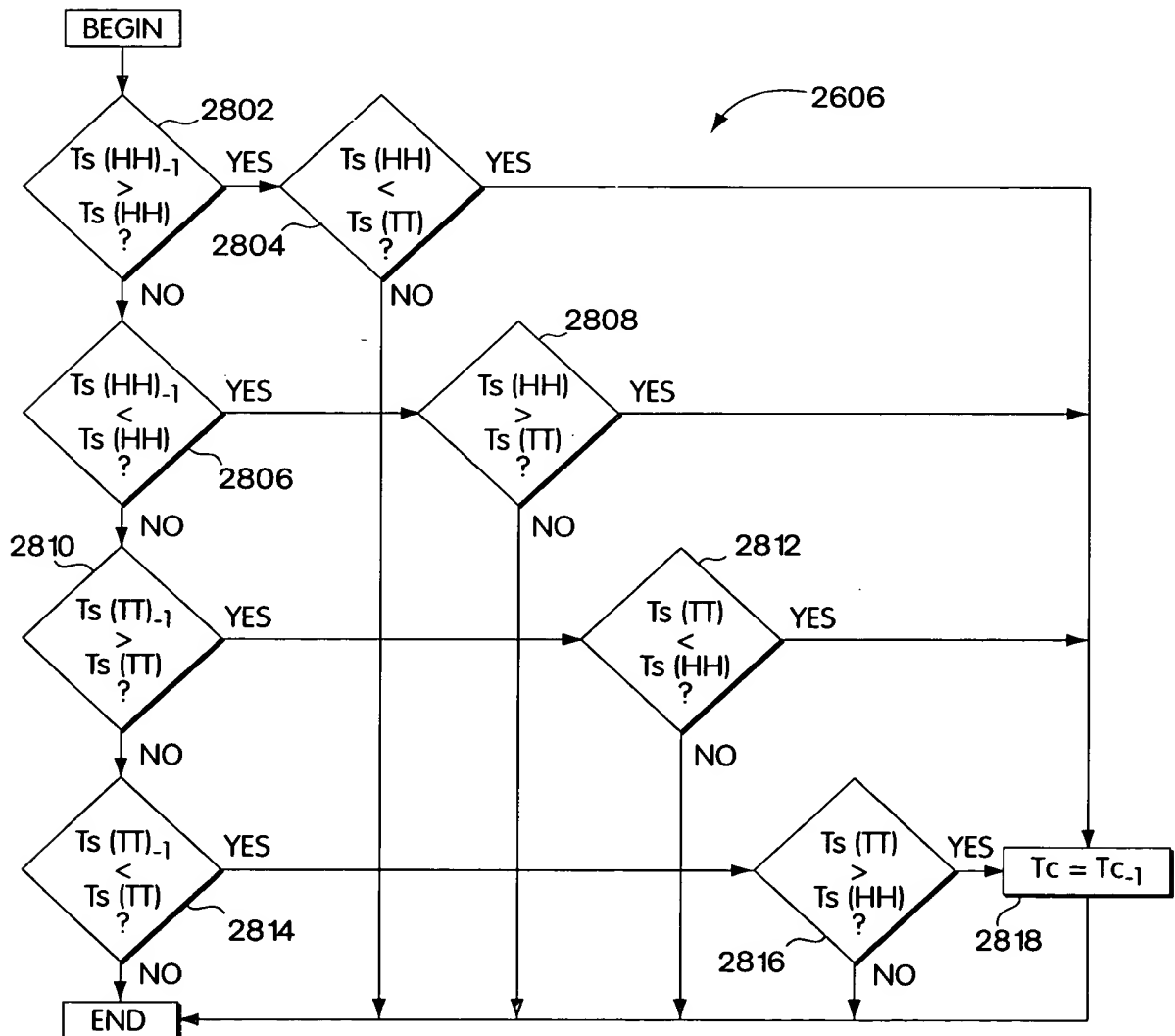


Fig. 28



25/42

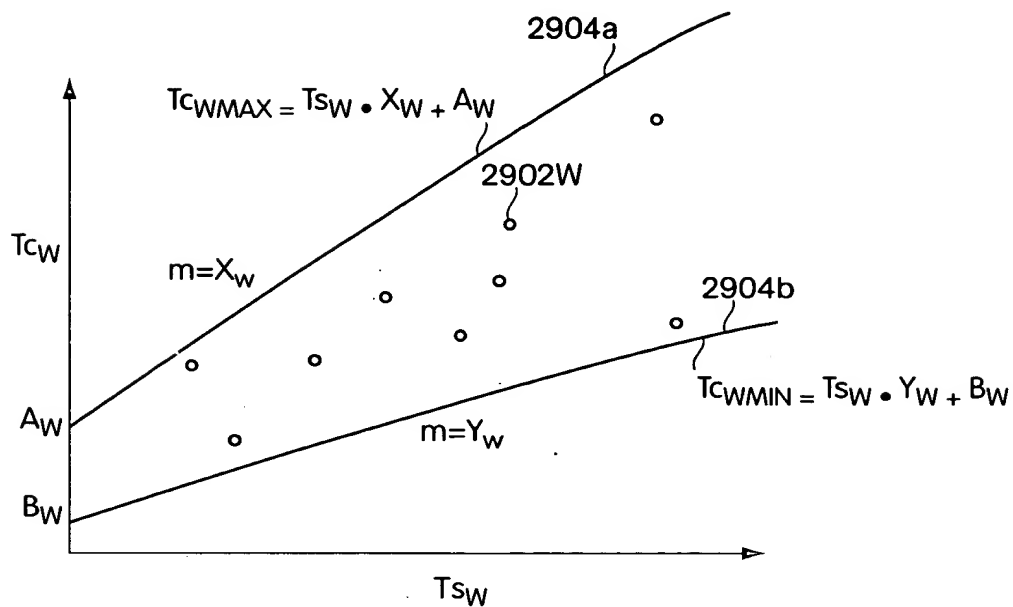


Fig. 29A

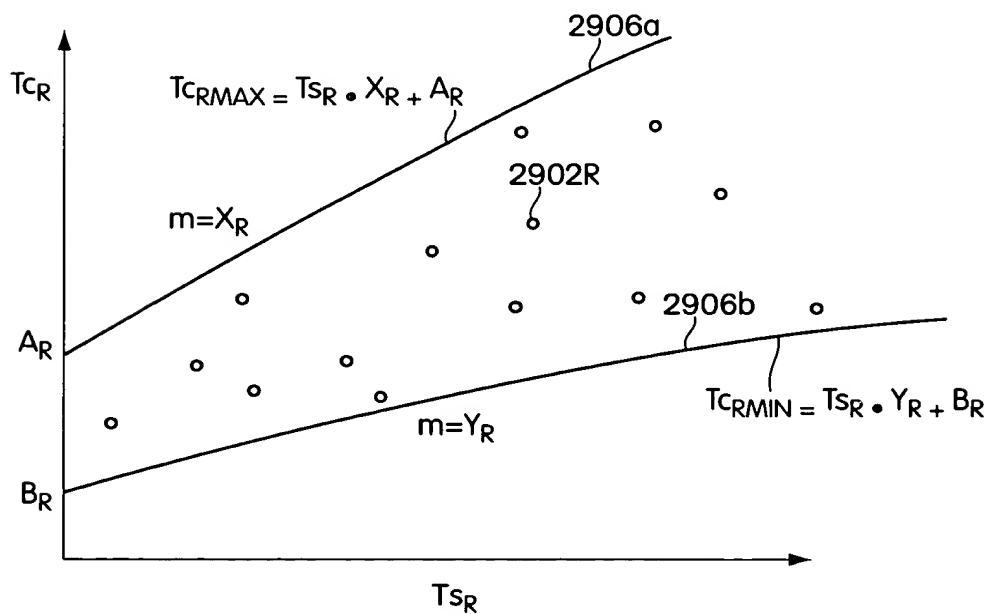


Fig. 29B

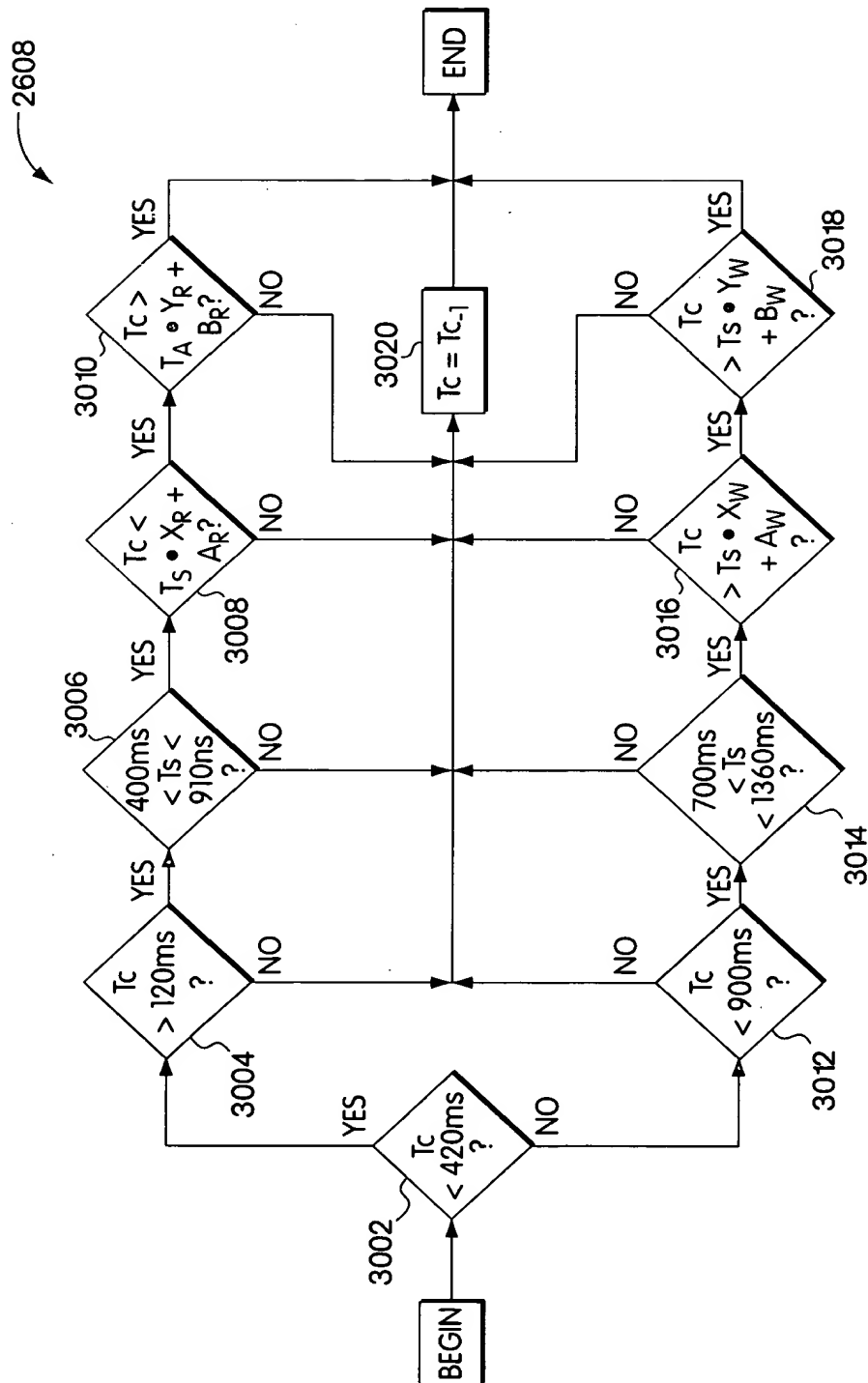


Fig. 30

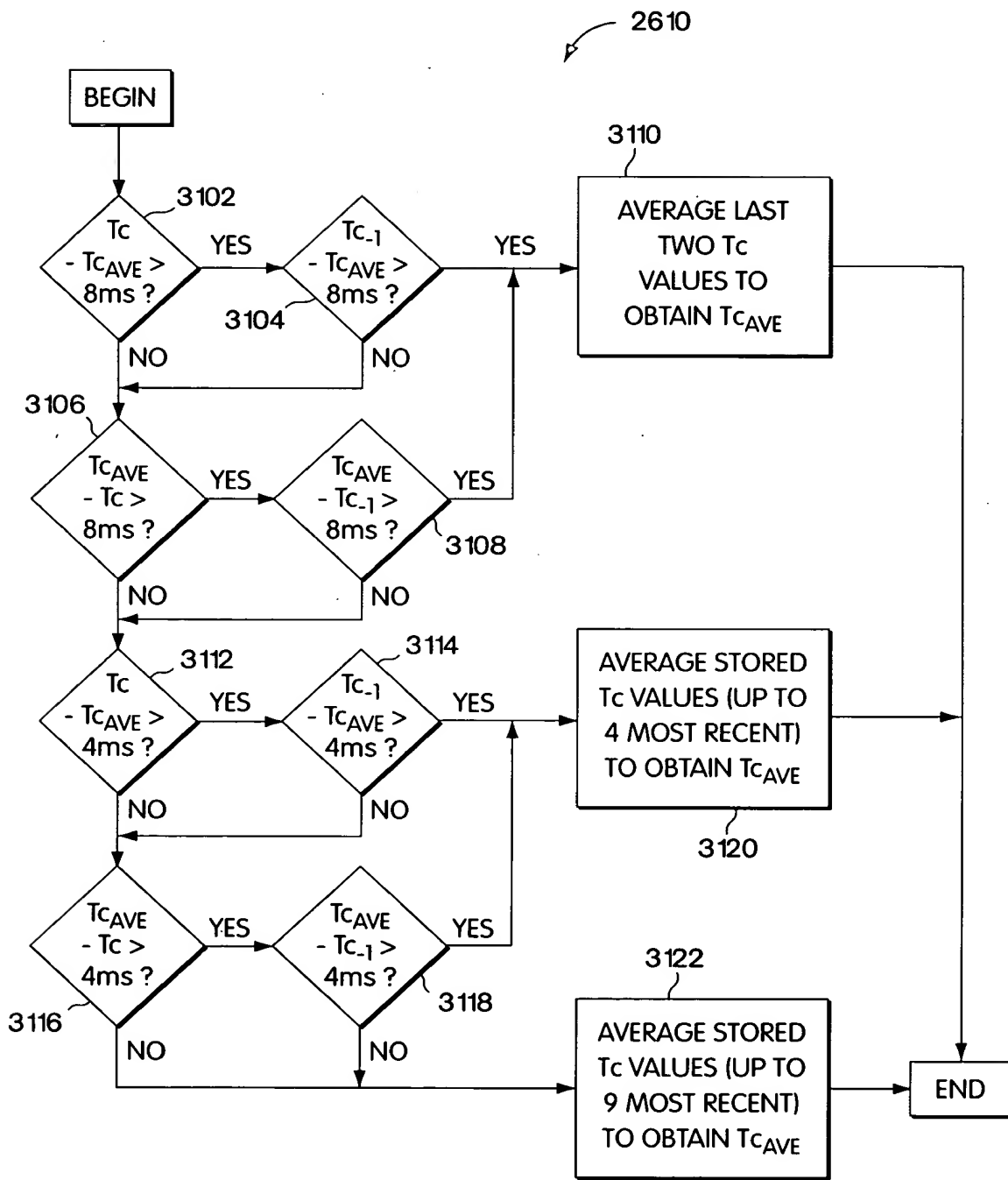


Fig. 31



28/42

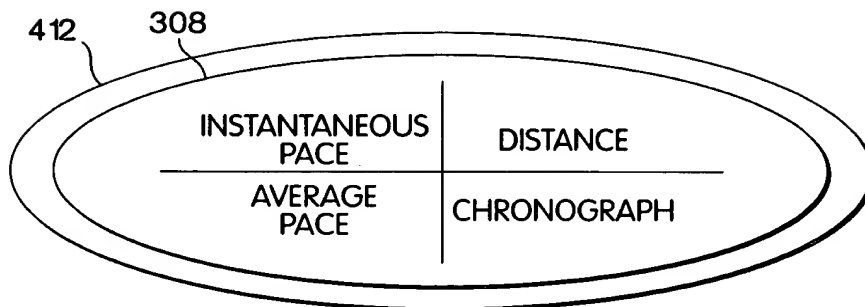


Fig. 32A

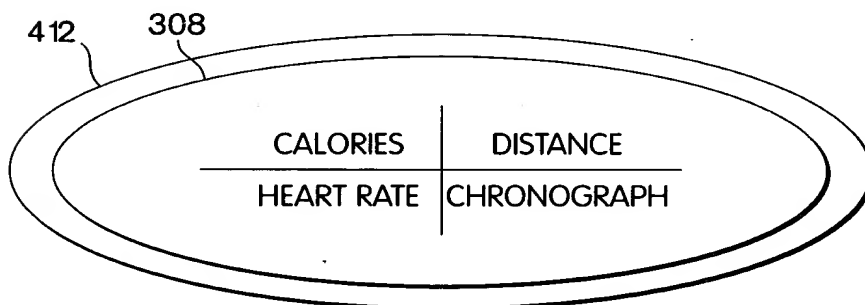


Fig. 32B

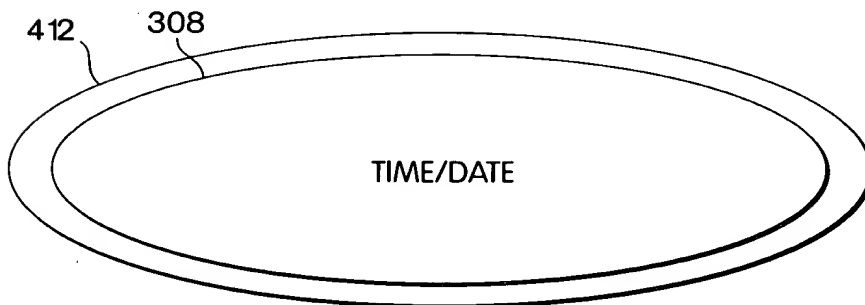


Fig. 32C

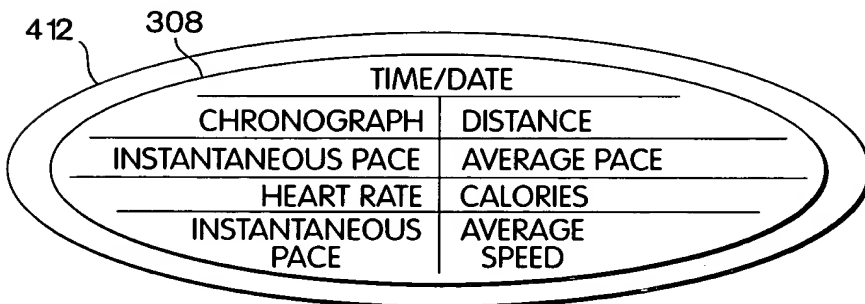


Fig. 32D



29/42

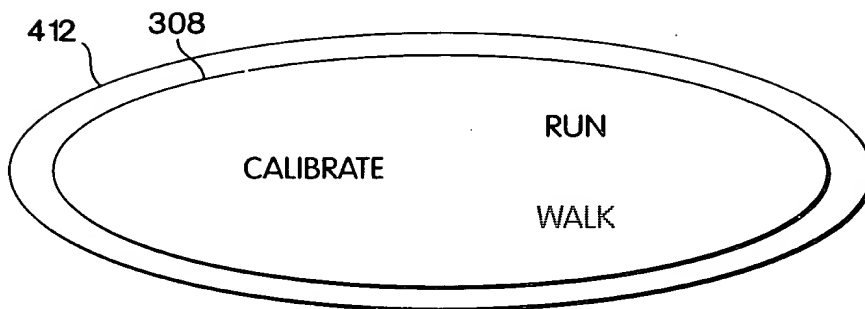


Fig. 32E

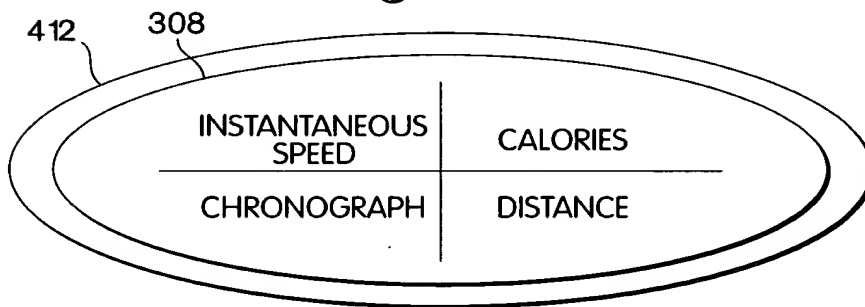


Fig. 32F

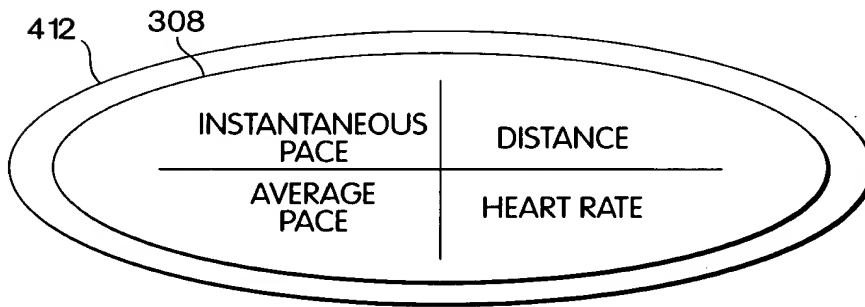


Fig. 32G

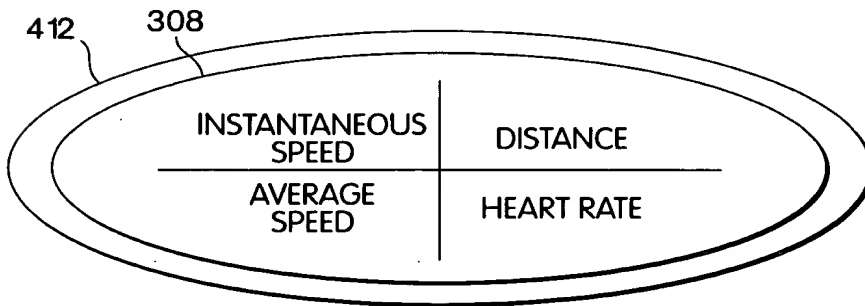


Fig. 32H



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

30/42

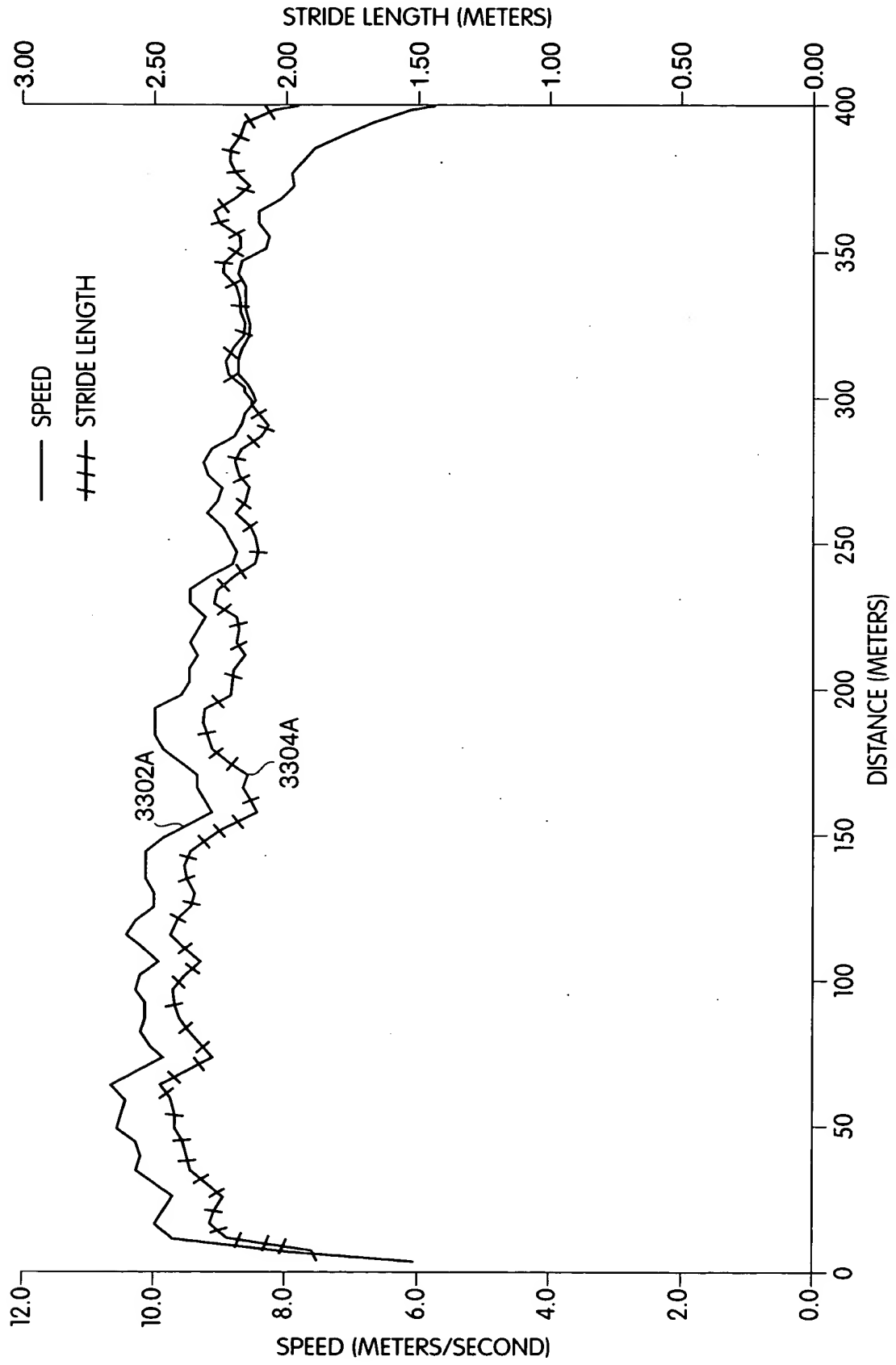


Fig. 33A



31/42

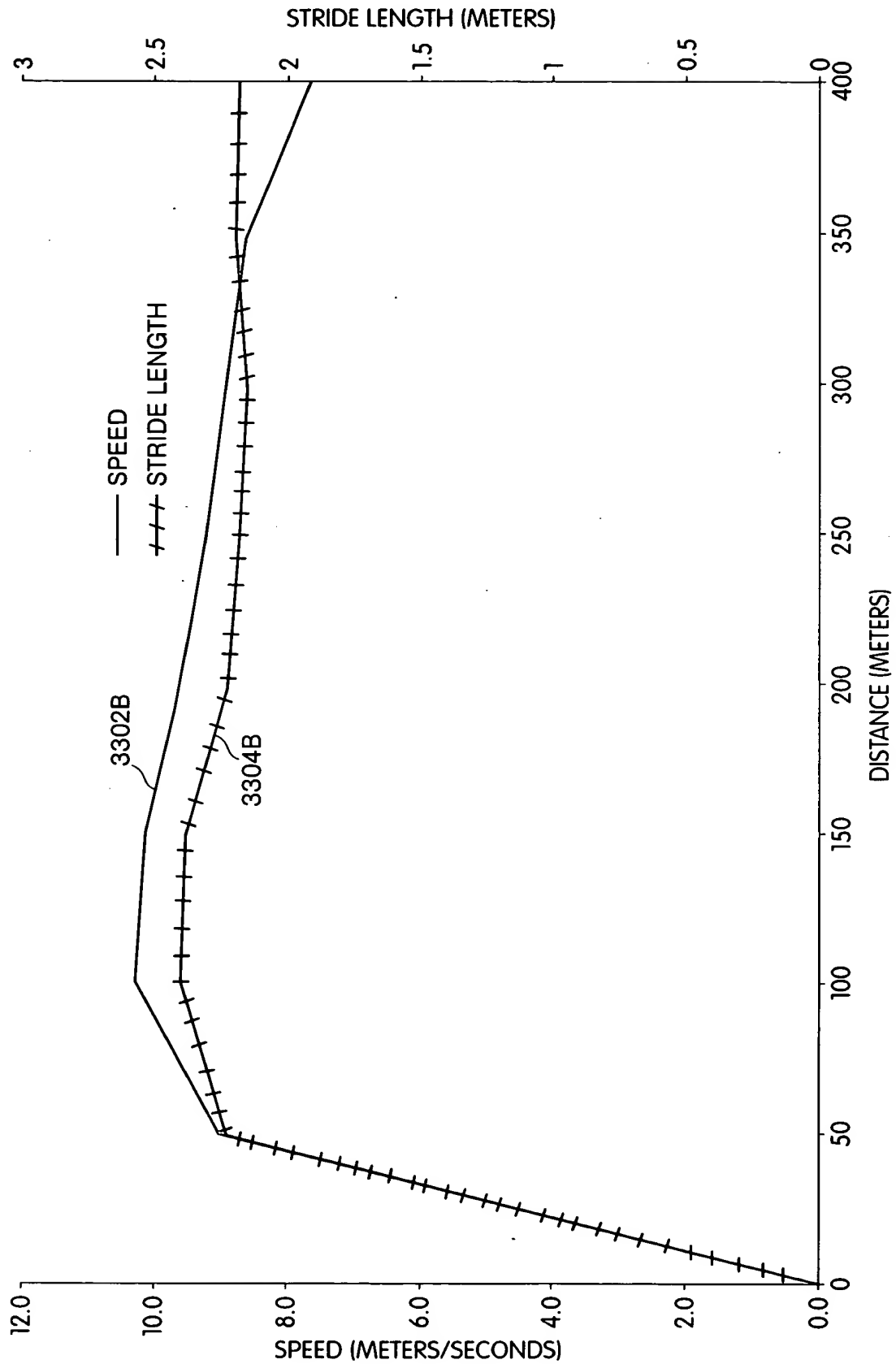


Fig. 33B



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

32/42

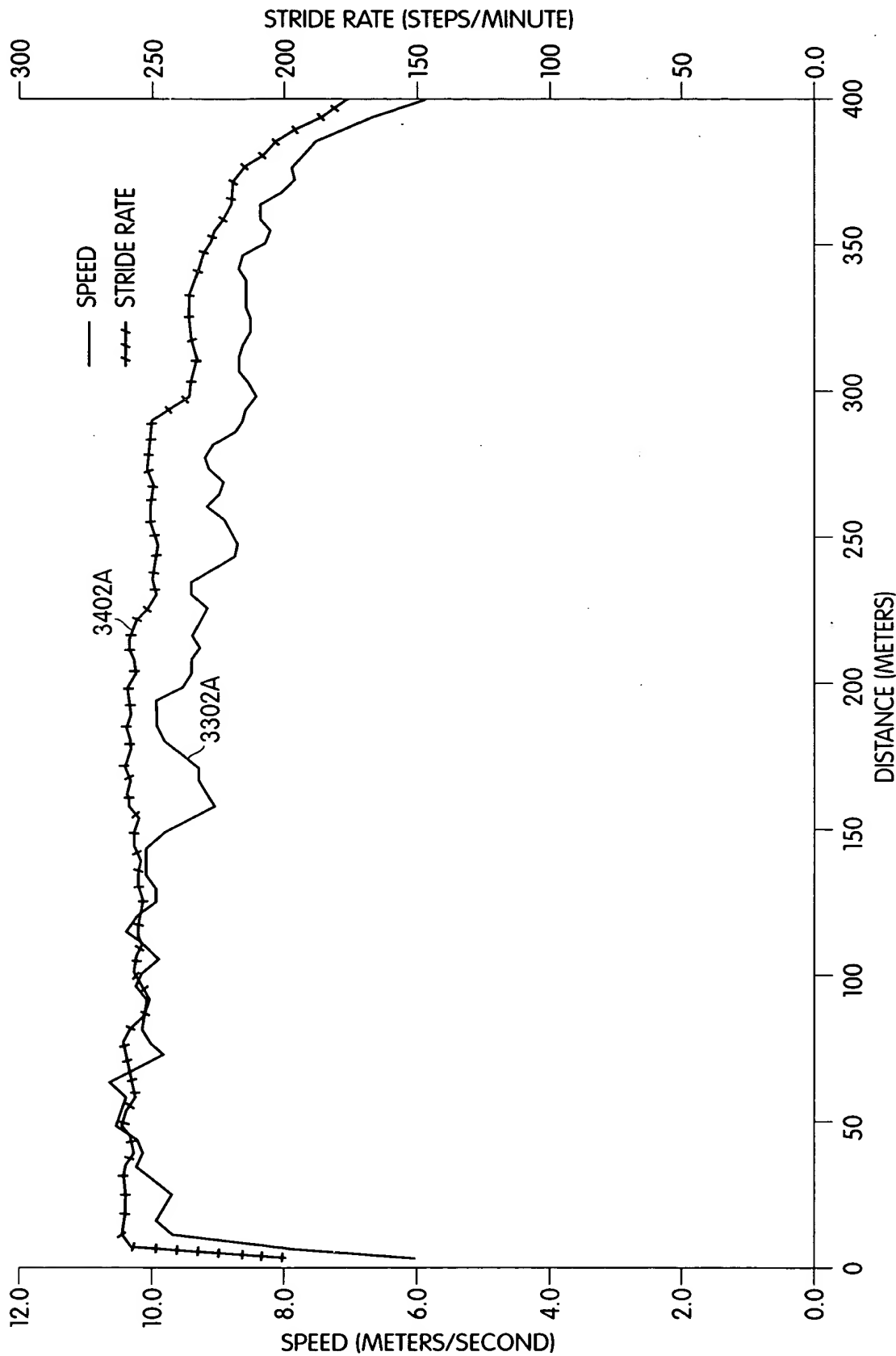


Fig. 34A



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

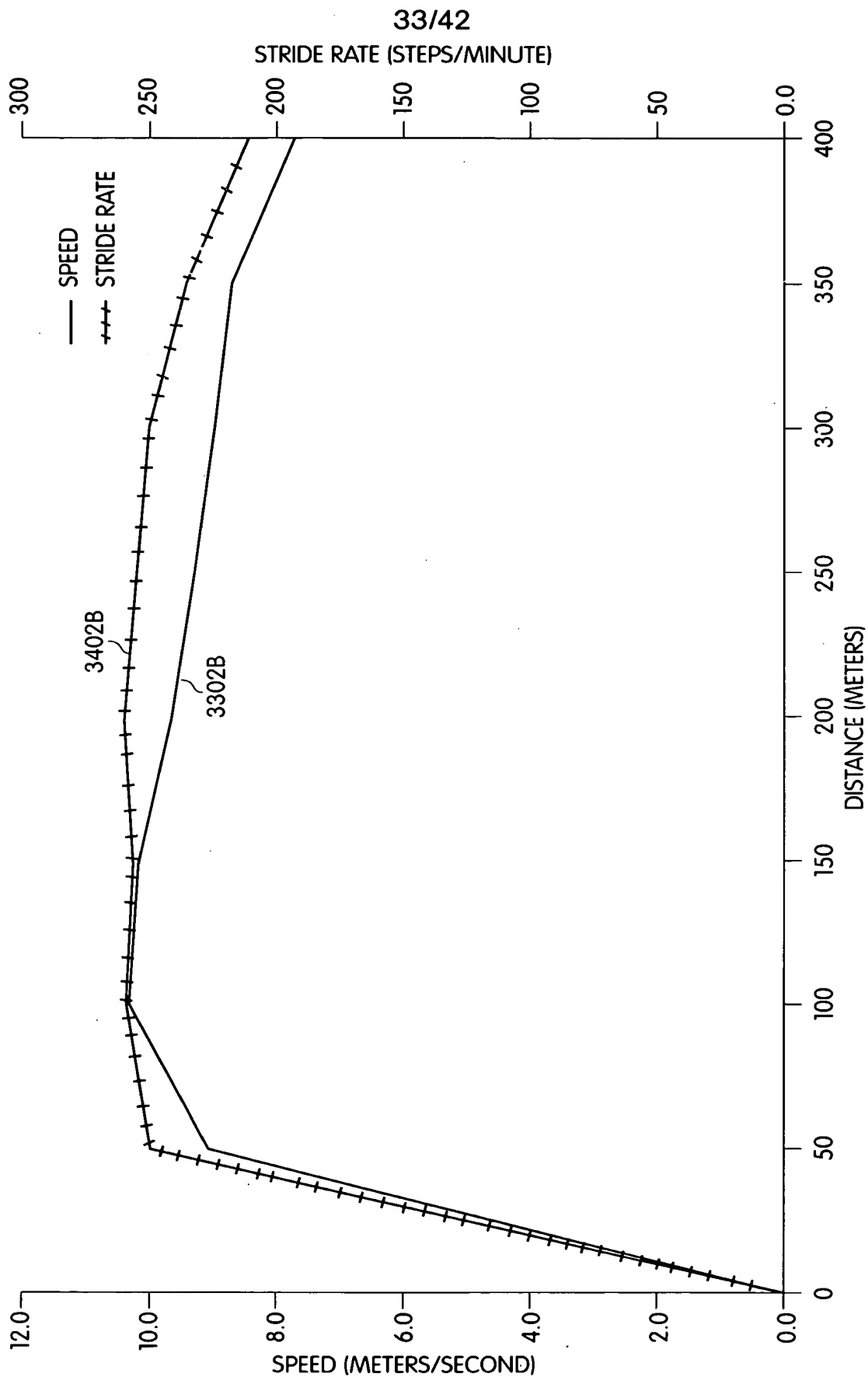


Fig. 34B



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

34/42

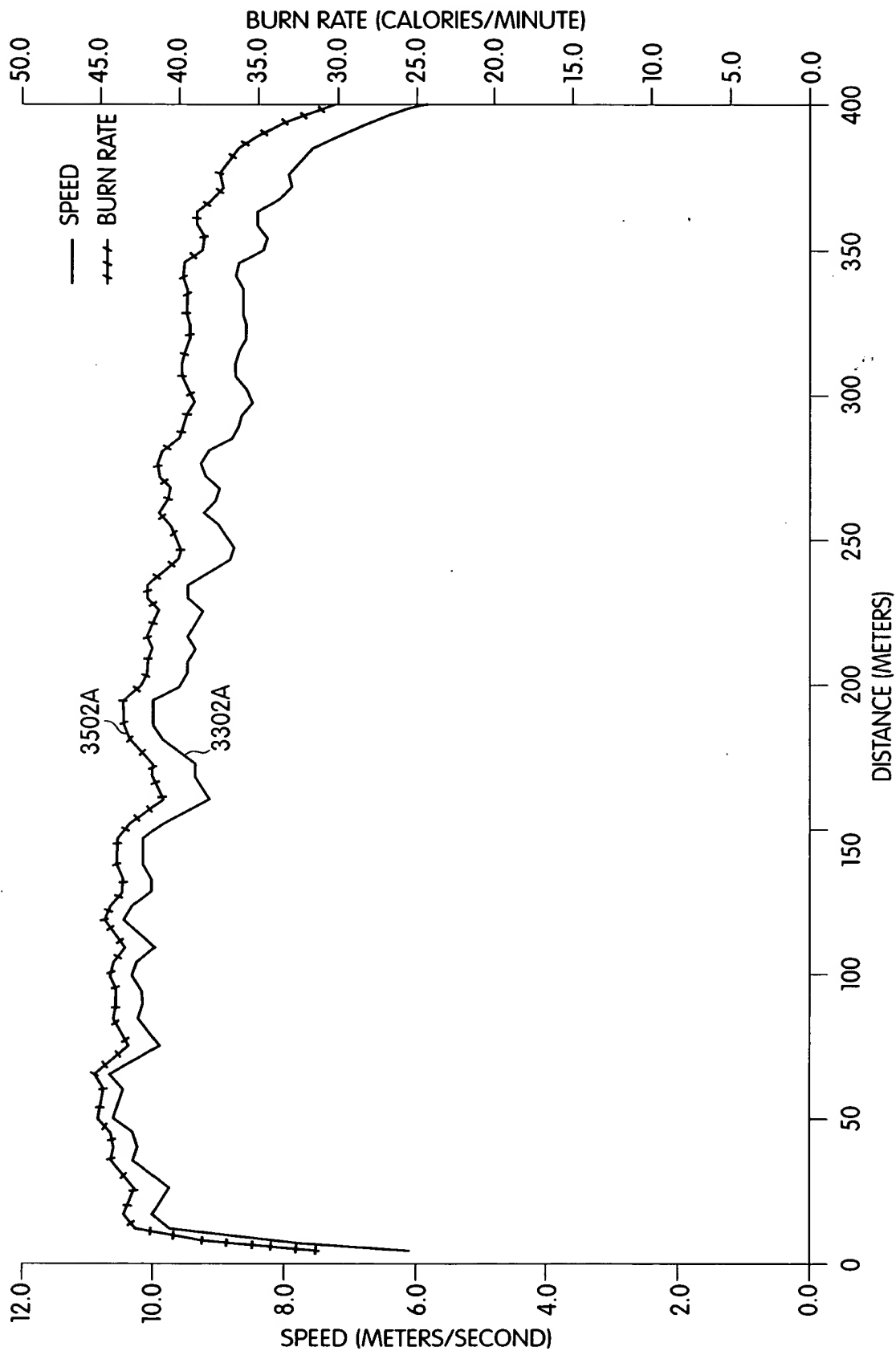


Fig. 35A



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

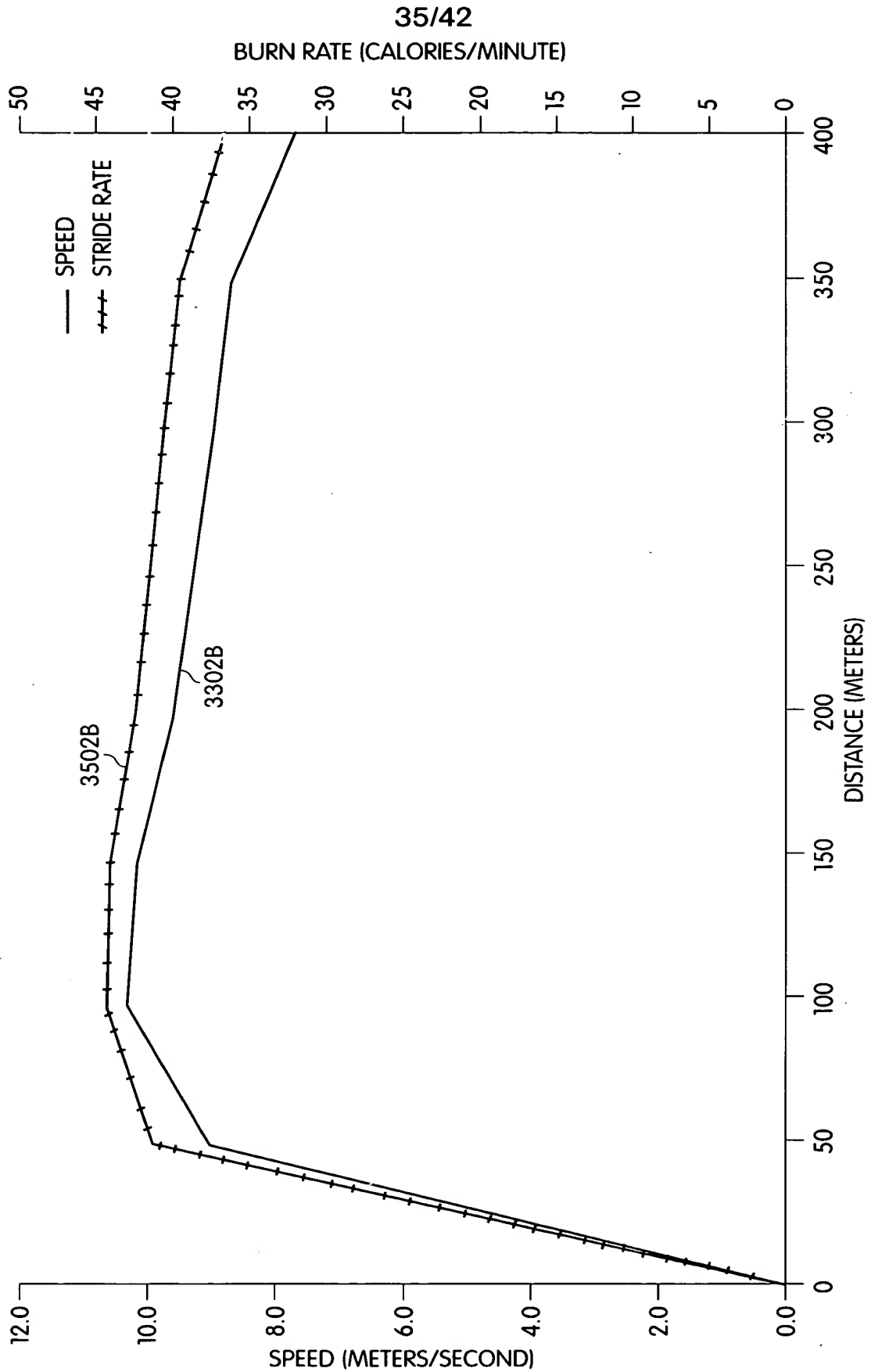


Fig. 35B



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

36/42

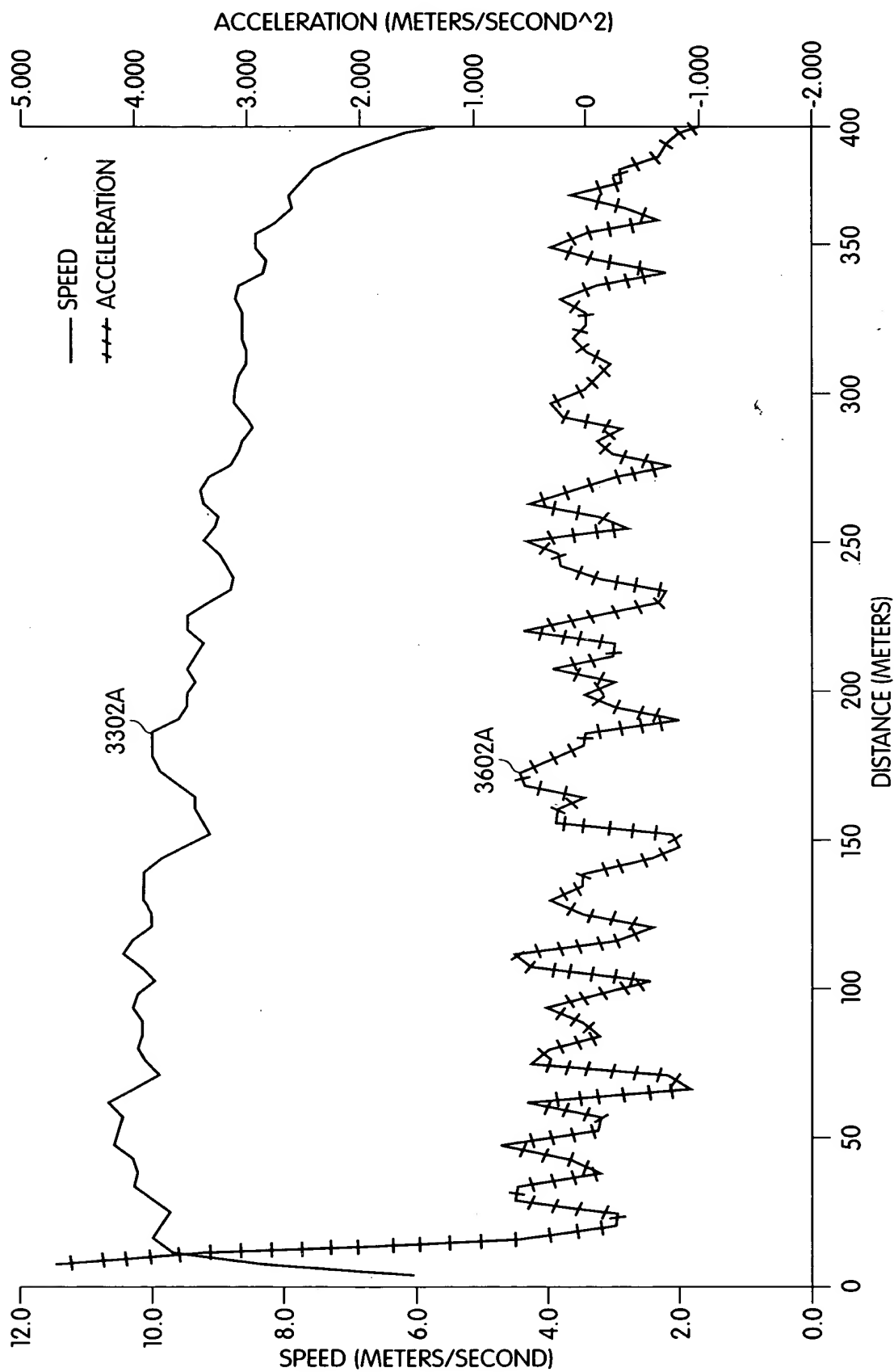


Fig. 36A



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

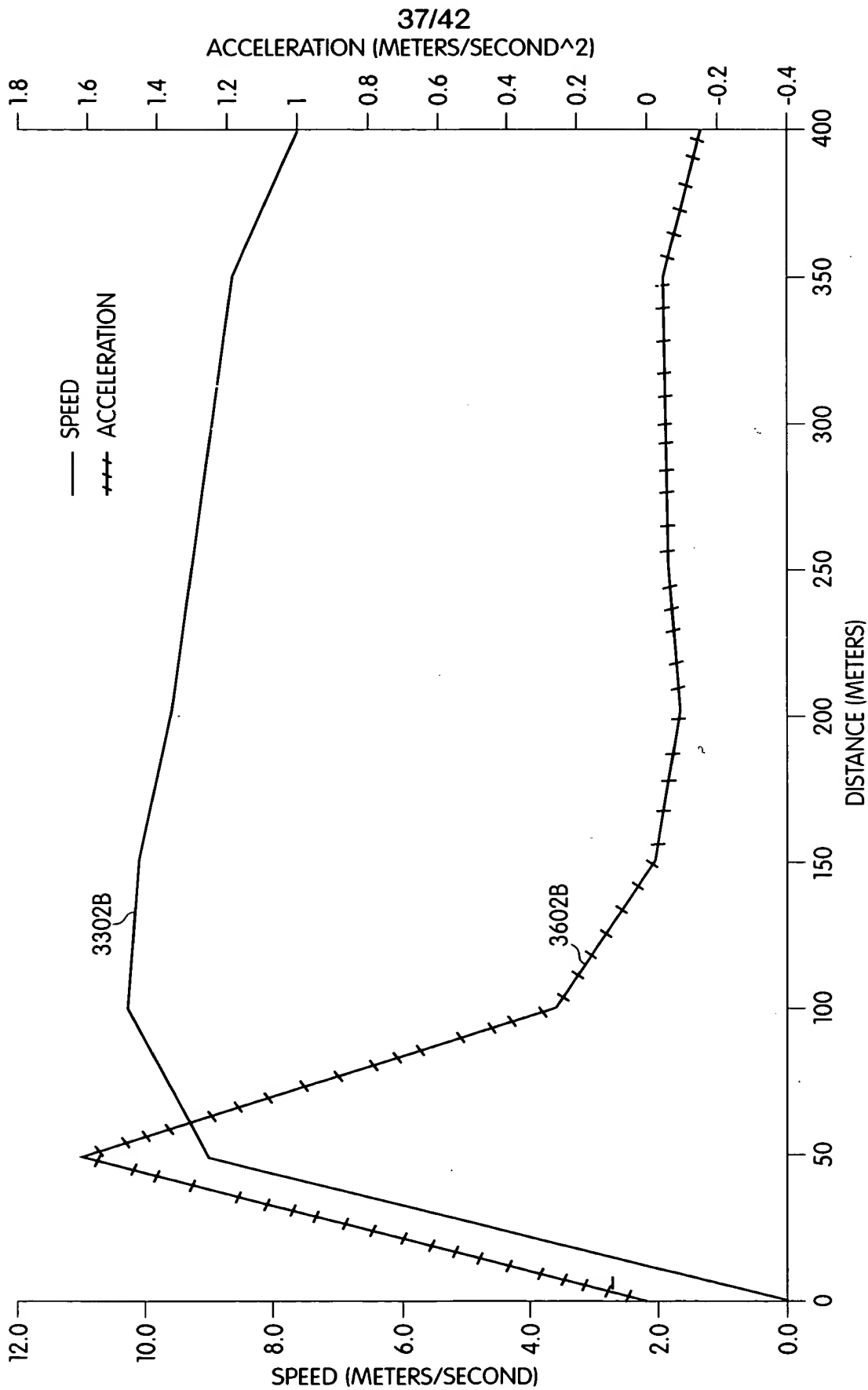


Fig. 36B



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

38/42

DISTANCE	RACE TIME	SPLIT TIME	AVERAGE SPEED	AVERAGE STRIDE LENGTH	AVERAGE STRIDE RATE	AVERAGE BURN RATE	TOTAL CALORIES	ACCELERATION
METERS	SECONDS	SECONDS	METERS/SECOND	METERS FEET INCHES	STEPS/MINUTE	CALORIES/MINUTE	CALORIES	METERS/SECOND
0	0	0	0	0	0	0	0	0
50	5.6	5.6	9.0	2.22	249.5	41.1	3.7	1.621
100	10.4	4.9	10.3	2.39	257.9	44.2	7.3	0.257
150	15.4	4.9	10.1	2.37	256.1	43.9	10.9	-0.030
200	20.6	5.2	9.6	2.22	259.7	42.3	14.6	-0.100
250	26.0	5.4	9.2	2.18	255.1	41.3	18.3	-0.063
300	31.6	5.6	8.9	2.15	250.4	40.5	22.1	-0.054
350	37.4	5.8	8.7	2.20	236.1	39.6	25.9	-0.048
400	43.9	6.5	7.6	2.18	211.1	36.5	29.9	-0.155
SPLITS								

Fig. 37



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

39/42

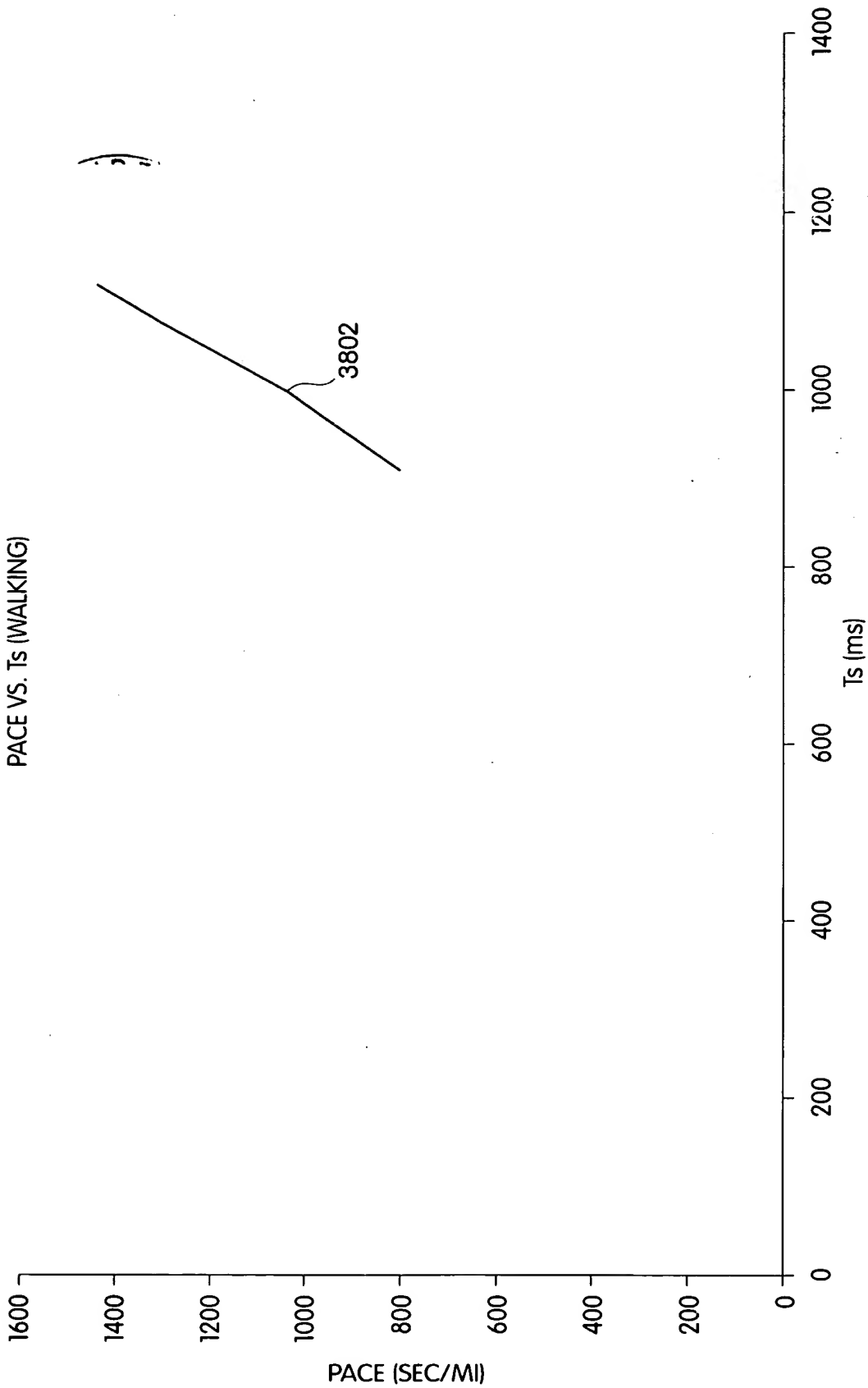


Fig. 38

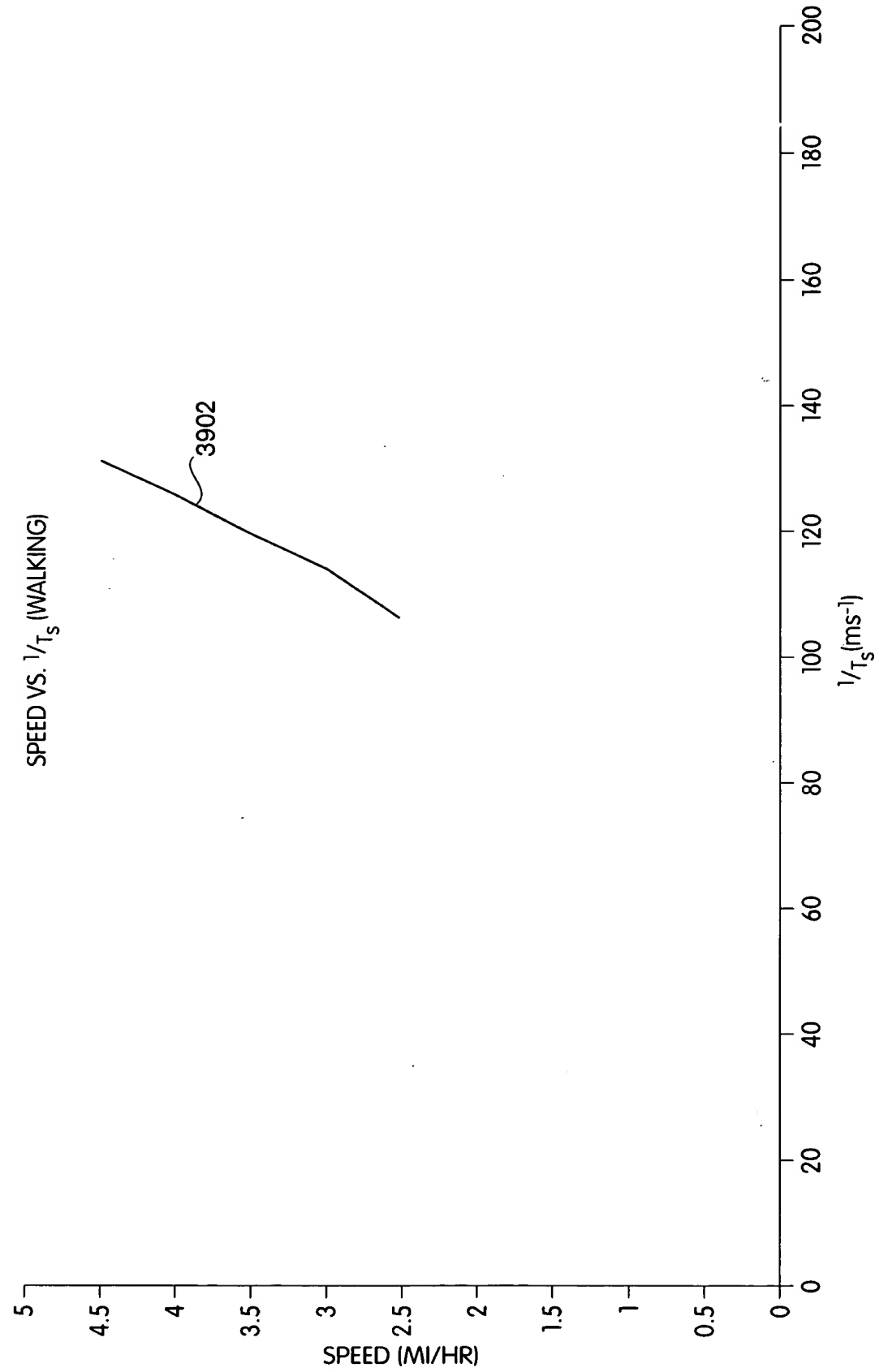


Fig. 39



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

41/42

SPEED (MPH)	PACE (SECONDS/MILE)	Tc (ms)	Ts (ms)	AVERAGE GROUND FORCE (LBS)	STEPS PER MILE	STRESS PER 1/10 MILE (LBS)	STEPS PER MINUTE	STRESS PER MINUTE (LBS)
5	720	302	730	181	986	17881	82	14901
6	600	270	702	195	855	16667	85	16667
7	514	254	676	200	760	15177	89	17717
8	450	234	652	209	690	14423	92	19231
9	400	214	638	224	627	14019	94	21028
10	360	204	618	227	583	13235	97	22059
11	327	190	600	237	545	12908	100	23684

Fig. 40



42/42

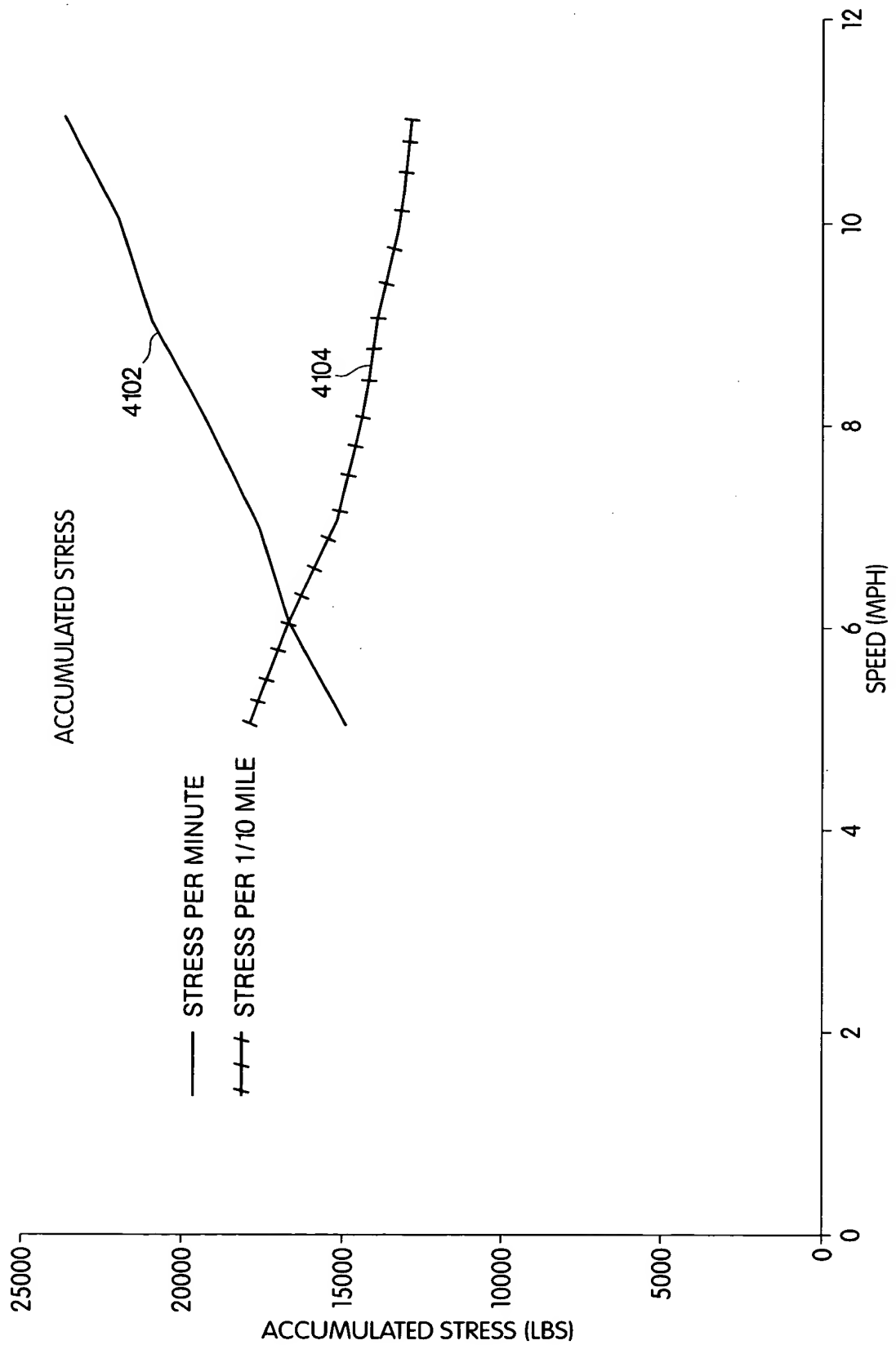


Fig. 41